

AD

USATSARCOM TECHNICAL REPORT 81-1

14 75 MEDIN-TR-81-4

APPROVED FOR PUBLIC RELEASE DISTRIBUTION UNLIMITED

x 6

HISTORICAL INFLATION PROGRAM.

(A COMPUTER PROGRAM GENERATION HISTORICAL INFLATION INDICES FOR ADMAN AIRCRAFT) (A COMPUTER PROGRAM GENERATING HISTORICAL INFLATION INDICES FOR ARMY AIRCRAFT) .

(9) Final kipt of

WARREN H./GILLE, JR/ FINAL REPORT



U.S. ARMY TROOP SUPPORT AND AVIATION MATERIEL **READINESS COMMAND**

COMPTROLLER **COST ANALYSIS DIVISION**

4300 GOODFELLOW BLVD. ST. LOUIS, MISSOURI 63120

41\$399



FILE COPY



SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
	3. RECIPIENT'S CATALOG NUMBER
TSARCOM Technical Report 81-1 AD-A096	228
4. TITLE (and Substite) Historical Inflation Program	5. TYPE OF REPORT & PERIOD COVERED
(A Computer Program Generating Historical	
Inflation Indices for Army Aircraft)	6. PERFORMING ORG. REPORT NUMBER
Antiqueton andress and many marriage,	6. PERFORMING ONG. REPORT NUMBER
7. AUTHOR(e)	8. CONTRACT OR GRANT NUMBER(*)
Warren H. Gille, Jr.	
9. PERFORMING ORGANIZATION NAME AND ADDRESS IIS Army Troop Support & Aviation Materiel Readines	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
US Army Troop Support & Aviation Materiel Readines Command, Office of the Comptroller, Cost Analysis	•
Division, Components & Operational Studies Branch 4300 Goodfellow Blvd, St. Louis, MO 63120	
11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE
	January 1981
	13. NUMBER OF PAGES
	79 pages
14. MONITORING AGENCY NAME & ADDRESS(If different from Controlling Office)	15. SECURITY CLASS. (of this report)
	UNCLASSIFIED 150 DECLASSIFICATION/DOWNGRADING
Í	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)	
The state of the s	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different fr	om Report)
18. SUPPLEMENTARY NOTES	
19. KEY WORDS (Continue on reverse side if necessary and identify by block number	->
Inflation (Economics), Indexes, Cost Analysis, Air	
Engine, Computer Program, Computerized Simulation,	
Series Analysis, Army Aircraft, Cost Estimates, Pro	ocurement, Computations,
History, Prices, Tracking, Microeconomics.	-
ABSTRACT (Continue on reverse side if necessary and identify by block number. This report extends and revises Technical Report 8	0-1 which presents and de-
scribes the Historical Inflation Program, a compute	
I	he program can be updated
monthly, is easily revised for changes in Bureau or	
and is capable of handling data for all fiscal year	
ed as monthly, quarterly, Fiscal Year, and Calendar	r Year inflation indices
(in Calendar Year 1967 base) and inflation factors	(in any Fiscal Year base).
This report contains updated tables of inflation fa	actors, expressed in a FY 80

DD 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

20. ABSTRACT.

base. These indices and factors provide a means of adjusting historical cost data for the procurement of Army Aircraft to constant year dollars. Additional features include: computations for the Derivation of Revised Weighting Factors, detailed indices enabling the adjustment of historical Labor and Material cost separately, a discussion of aggregate weighting factors for Labor and Materials, (including trends from sensitivity analysis with more background materials), and additional documentation aimed at making the report useful to a large cross section of the DOD/Rotary Wing Aircraft Community.

DISCLAIMER STATEMENT

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other documentation.

Access	lon For	
NTTS	7.	
LTIC T	A.B	
Unanno		
Justif	ication	
By		
Distri	bution/	
Avail	ability	Codes
	Avail ar	
Dist	Specia	
1		
14		
L A i	1 7	

ACKNOWLEDGEMENTS

The author extends his appreciation to the Kansas City Regional Office of the Bureau of Labor Statistics, U.S. Department of Labor, for special assistance with wage and price data.

Ms. Marva Campbell provided excellent clerical support in the revision of this paper.

TABLE OF CONTENTS

		PAGES
I.	APPLICABILITY	1
II.	OVERVIEW OF HISTORICAL INFLATION PROGRAM A. History B. Construction of Indices - Methodology C. Indexing Techniques D. Weighting Factors E. Data F. Validity and Firmness of Data G. Particular Problems H. Change in Content from the Previous Report	2-8 2 3 4 4 5 5 6 8
III.	DATA CONCERNING THE MATERIAL CONTENT OF U.S. ARMY HELICOPTER SYSTEMS	9-14
IV.	ANALYSIS: (TECHNICAL SECTION) A. Chronology 1. Characteristics of the RAND Report 2. Characteristics of the September 1973 Cost Research Report 3. Characteristics of the August 1974 Cost Research Report B. Data Sources C. Methodology 1. Overhead and Productivity Adjustments 2. Revision of Weighting Factors 3. Construction of Indices	15-23 15-17 15 16 17 18 18-23 18 19 20
v.	SENSITIVITY ANALYSIS FOR AIRCRAFT AIRFRAME	25
VI.	DESCRIPTION OF COMPUTER PROGRAM	28
VII.	REFERENCES	29
'III.	BIBLIOGRA PHY	30
	PENDIX A: Computations for the Derivation of Revised Weighting Factors for the Historical Inflation Program PENDIX B: Producer Price Indexes and Earnings Series Used in Historical Inflation Program	A-1 B-1

TABLE OF CONTENTS

		PAGE(s)
APPENDIX C:	Historical Flow of Producer Price Indexes and Earnings Series Used in Historical Inflation Program with Revised Weighting Factors	C-1
APPENDIX D:	Annual Data for Historical Inflation Program	D-1
APPENDIX E:	Monthly Data for Historical Inflation Program	E-1
APPENDIX F:	Historical Inflation Indices	F-1
APPENDIX G:	Annual Data for Historical Inflation Program, Raw Material Portion Only	G-1
APPENDIX H:	Monthly Data for Historical Inflation Program, Raw Material Portion Only	H-1
APPENDIX I:	Historical Inflation Indices, Raw Material Portion Only	I-1

I. <u>APPLICABILITY</u>. The inflation indices and factors published in this report are applicable to the adjustment of historical costs for the procurement of Army aircraft. These costs are currently funded by the Aircraft Procurement, Army and Other Procurement Army appropriations.

II. AN OVERVIEW OF THE HISTORICAL INFLATION PROGRAM.

A. History.

The Historical Inflation Program for Army aircraft procurement was developed using a sequence of documents, the first being Aerospace Price Indices, by H.G. Campbell (RAND # R-568-PR, 12/70). Essentially, the RAND document established a basis for the construction of general indices, identified items of special interest and concern, and indicated that no substitute exists for thorough analysis of the specific items being characterized by an historical index. Several indices, designed specifically for rotary wing aircraft, have been developed for the adjustment of procurement cost since that time by the United States Army Aviation Systems Command, and this function has been carried over to the Components and Operational Studies Branch, Cost Analysis Division, Office of the Comptroller, USATSARCOM.

The current indices are based on research done in the period 1972 to date. In July 1973, the Office of the Comptroller, Cost Analysis Division, made a study of materials used in the Army helicopter systems then, or most recently, in production. Cost Information Reports were assembled, and contractors were asked to supply lists of materials for both airframe and engine, on the basis of contribution to weight. Contractor technical and engineering personnel provided assistance with data interpretation and definitions for items whose composition was unclear from engineering documents and Detailed Weight Statements.

The following aircraft were selected:

UH-1H OH-6A AH-1G CH-47C OH-58A CH-54B

This selection of aircraft is deemed typical for several reasons. First, the six helicopter systems listed above make up the majority of the U.S. Army Air Order of Battle listed in Section III. Second, a number of these aircraft had been produced on a long term, continuing basis in previous versions. And, third, and most important, they are among the systems most likely to be used in developing Cost Estimating Relationships for new systems by use of parametric techniques.

The September 1973 Historical Inflation Cost Research Report, cited in the references, was the first report to make full use of this information. It was updated by the August 1974 Cost Research Report, and then by a series of expanded analyses under current title, <u>Historical Inflation Program</u>, since that time. A list of the assumptions and changes in methodology over the period referenced are included in the body of the Technical Section.

B. Construction of Indices - Methodology.

The indices are developed by a stepwise, building process, which computes the contributions to cost on a weighted value-added basis.

- 1. First, the contribution to cost of small parts and other purchased equipment is calculated.
- 2. Next, the cost contribution of purchased parts is combined with that of raw materials to get the cost of purchased materials.

- 3. Purchased material cost is then combined with contractor labor cost to compute the index for products such as engine or airframe.
- 4. The indices for engine, airframe, and avionics are combined to get an overall index for aggregate aircraft.

C. Indexing Technique.

The procedure used is "Cost-Weighting". The information obtained from 1973 research on "helicopter materials" established percentages based on weight. Because the indices used to track material costs are based on monetary considerations (e.g., Producer Price Index; Wages, by Standard Industrial Code), percentages by weight had to be transformed into percentage contributions to cost, if PPI and SIC inflation factors were to be applied directly. Based on the premise of profit maximization, contractors should tend to minimize the use of expensive materials subject to maintaining acceptable performance standards; essentially, materials with a high cost per unit weight ratio would be used sparingly. Adjusting a percentage based on weight using a monetary index would not only result in an improper index initially, but also one with diminishing reliability. The latter bias is avoided by calculating the contribution to cost, instead of merely the contribution to weight.

D. <u>Weighting Factors</u>. Although the model is developed by an iterative, stepwise process, the revised weighting factors in the table (at the end of Appendix B) implicitly include all calculations. The index, as stated, is merely the direct sum of

the products of the weights and their corresponding material index values. The development of weighting factors is illustrated in the Technical Section.

E. <u>Data</u>. The data used appear in two different forms. Yearly data are presented by Calendar Year 1947 to date, and monthly data for 1967 to date. The yearly data, pre 1958, are condensed into three columns; the data for 1958 and later are presented in an 18 column format - 14 columns for material inputs, and 4 for labor. Beginning with report 76-1B, all columns of the data set have been identified by PPI and SIC code, as well as a verbal description in the column heading. <u>PLEASE NOTE</u>: The data, their characterization, and any redefinition, by the Bureau of Labor Statistics over the years, are tracked in line diagram C-2.

F. Validity and Firmness of Data.

The Producer Price Index and Wage Data was supplied by the Kansas City Regional Office of the Bureau of Labor Statistics, U.S. Department of Labor. The data comes in three types of published form: (1) a cumulative history covering all relevant past years on a monthly basis. (2) A yearly edition (such as Wage and Price Index Annual Supplement) which lists the previous 12 months, and (3), monthly publications which list the most current month and several other months for comparison.

For data to be "firm" it must be at least 18 months old, in most cases, because it is benchmarked and adjusted after the fact. For example, small samples are taken throughout the year; however, during one month (the benchmark month), a much more comprehensive

sample is taken. Due to its significantly larger sample size, the benchmark month's sample is felt to be more representative than those of other individual months, and if the benchmark diverges from the pattern, the other months are adjusted proportionately to conform to its base as benchmark.

The data in the cumulative history "type" publication is felt to be firm or "final". Basically, such publications provide a chronological listing of all firm data available for the past history of those indices. However, the data in such publications is usually 18 to 24 months behind the current period. The data for each month listed in the Annual Supplements is not necessarily firm because benchmarks occur during the Calendar Year, and at different times for different series. Adjustments may not have been made before the Annual Supplements are published. The monthly publications, which contain information on the most current periods, are even more tentative. In general, the Producer Price Index Data are firm before Wage Indices for the corresponding month, probably due to the fact that it is easier to define and measure price changes for commodities than for human skills.

G. Particular Problems.

1. The Wage Data for the period CY 1971-CY 1973 changed, in many cases, during FY 75-FY 76. The wage-price freeze disallowed certain salary and wage increases, but a number of these were awarded on a retroactive basis based on legal decisions rendered several years after the fact. Because such payments involved costs directly attributable to labor services during the

period, these payments had to be incorporated in the indices to provide an accurate measure of labor earnings. *

2. With the September 1978 issue of Employment and Earnings, the reporting categories for a number of types of production labor were changed. In effect, the 1967 Standard Industrial Classification Code has been supplanted by the 1972 SIC Code.

The Changes are as follows:

SIC Code & Title		-to-	SIC Code & Title			
3674,9	Electronic Devices & Components		367x	Electronic Com- ponents and Access- ories		
3722	Aircraft Engines and Engine Parts		3724	Aircraft Engines and Engine Parts		
3723,9	Aircraft Parts and Equipment		3728	Aircraft Equipment		

The reclassification had little or no impact on this study due to the essential similarities, by definition, of the old and new labor categories.

3. Potential discrepancies in the data set were eliminated by comparing data elements with the most recent data in the BLS computer for the 14 material and 4 labor categories used in the report. All data were verified to be the latest and most accurate available, on 15 December 1980, by the Kansas City Regional Office, BLS.

^{*}See BLS Bulletin No. 1312-10, Employment and Earnings 1909-75 for a detailed explanation (esp. p. 769).

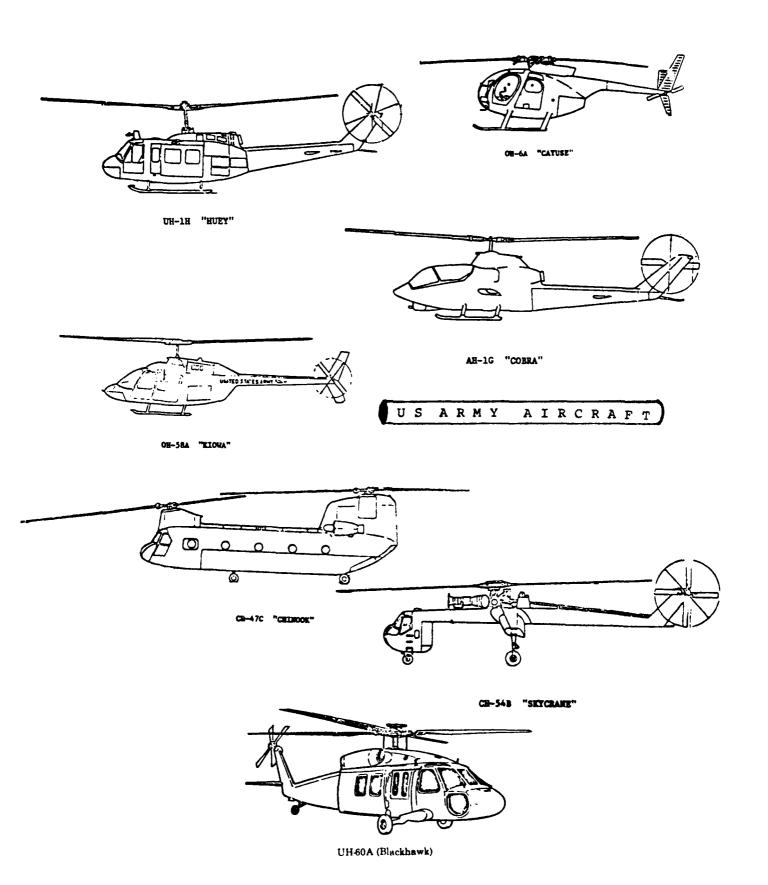
H. Change in Content from the Previous Reports.

A printout of the computer program used for the Historical Inflation Program is not included in this report, for two reasons. First, it was found that a list of structural equations would better serve the purpose of elucidating the model. At the same time, with the reduced form equations and clearly identifiable data sets, any index figure can be checked by direct calculation (See Appendix B, page B-4). Second, direct duplication of the deck from the original is more accurate and efficient than keypunching copies from the program source listings, should such an external need ever develop.

A sensitivity analysis, which displays the effects resulting from a change in the relative weights of labor and material in the Historical Index, has been included in this revision. percentage contribution to cost attributable to labor and materials varies among aircraft systems, and the values used in this report--.378 (materials) and .622 (labor) -- are an average for the six systems referenced. The sensitivity analysis yields a measure of the extent to which the index for a single aircraft system would vary, if that system is built with an aggregate labor/material mix which differs from the six system average. The accuracy of the reweighted index, however, also requires that the other assumptions be well satisfied, i.e., the 14 material and 4 labor indices are typical of the system being reviewed. Because such weighting is a concern in developing estimates in inflated dollars, the effect of such "weighting changes" should be of significant interest to many readers.

DATA CONCERNING:

The Material Content of U.S. Army Helicopter Systems



Air Order of Battle

United States Army - Quantities and Types of Aircraft

ROTARY WING AIRCRAFT

System Designation	Popular Name	Approx Empty Wt.	No. of Aircraft	Percent of Fleet
AH-1	"COBRA"	5,800 lbs.	800	10.1%
UH-1	"HUEY"	5,100 lbs.	4,200	52.8%
OH-6	"CAYUSE"	1,200 lbs.	450	5 .7 %
ОН-58	"KIOWA"	1,750 lbs.	1,900	23.9%
CH-47	"CHINOOK"	19,500 lbs.	430	5.4%
CH-54	"SKYCRANE"	19,800 lbs.	7 5	1.0%
UH-60A	"BLACK HAWK"	10,500 lbs.	91	1.1%
AH-64A	"ADV. ATTACK"	10,400 lbs.	0	0%
			7,946	100.0%

Sources: FM 101-20 (UNCLASSIFIED).

World Combat Aircraft Directory

Doubleday and Co.,

BLACK HAWK PM Office

ANSAV-CCE

31 July 1973

Mr. Carald Dockins, Acting Chief, Estimates and Studies Branch HEYDRAYDUM THUO:

POR: Mr. Edward P. Laughlin, Chief, Cost Analysis Division C

SUBJECT: Naterial Composition Analysis of U.S. Army Helicopters, July 1973

1. On 6 June 1973, this office received a request from Mr. W.J. Tropf, AMC Compreher Office, Cost Analysis Division, for the material composition of a UH-III halkopter. On 18 June 1973, Chief, AVSCOM Compreher Office, Cost Analysis Division requested a similar analysis be performed on the following Army helicopters:

- G=47C.
- OH-6A.
- OH-56A. 12

AH-1C.

CH-54B.

2. A search of the technical data files and aircraft drawings failed to produce the desired data. The analysis was completed with the assistance of AvSCOF Systems Engineering Division, Directorate of RDEE and pertinent U.S. Army Plant Activities. Contractors were also contacted during the data search, and others. The data obtained are a combination of expert opinion, engineering estimates and contractor data obtained under previous contracts.

3. The following Cost Analysis personnel were assigned to this project:

Gerald Dockins/James Cadell Gerald Dockins/James Cadell **Cerald Dockins** John Thilmany Sames Cadel) Assigned To Aircraft System Ch-47C CH-58A OH-EA TH-13

31 July 1973 KMSAV-CCE SCHOOLTE Composition Analysis of U.S. Army Relicopters, July 1973

4. Copies of the Material Composition Analysis have been placed in the fellowing files:

a. A new file folder titled "Material Composition Analysis".

b. A complete copy of the findings placed in the file folder titled "inflation".

c. A separate file of the findings relating to turbine engines has been created.

5. Summary Tables and Material Composition Analyses are inclosed.

Jumes T. Cald

l Incl

/ JAMES N. CADELL Math-Stat

Material Composition Analysis of Army Helicopters (Dated July 1973) Material (Pounds)

U.S. Army Helicopters

Aircraft Model	Empty Weight	Aluminum	Steel	Magnesium	Titanium	Copper	Brase	Bronze	Lead	Tungsten	Nickel Alloy	Nonmetali
AH-1G	5,394	1,888	1,780	216	108	593	0	0	216	0	0	593
UN-1M	4,973	1,579	1,718	280	70	400	100	0	100	0	0	726
OR-6A	1,163	666	218	46	1	30	23	3	0	1	25	150
OH-58A	1,586	536	543	55	15	101	0	0	43	0	0	293
CH-47C	20,483	8,312	7,989	1,304	63	676	4	16	0	45		2074
CH-54B	19,765	8,931	3,860	72	970	516	20	23	1	0	788	4584

U.S. Army Turbine Engines

Engine Hodel	Dry Weight	Aluminum	Steel	Magnesium	Titanium	Copper	Nickel Alloy	Nonmetalic	Stainless Steel	Steel Alloy
T53-L-13	527	79	316	80	26	3	0	23	0	
T63-A-5A	138	1	108	26	0	٥	0	3	0	0
T63-A-700	138	ı	108	26	0	٥	0	3	0	0
T55-L-7C	590	0	510	50	20	10	0	0	0 .	
T73-P-700	981	1	0		0		290	0	596	94

U.S. Army Helicopter Airframe, Only.

Aircraft Model	Alr(rame Weight	Aluminum	Strel	Mngnenium	Titanium	Copper	Brass	Bronze	Lend	Tungsten	Nickel Alloy	Nonmetal to
AR-1G	4,867	1,809	1,464	136	82	590	0	0	216	0	0	570
UR-1H	4,446	1,500	1,402	200	44	400	100	0	100	0	0	700
OH-6A	1,025	666	109	20	1	30	23	3	0	1	25	147
OH-SBA	1,446	536	434	29	15	101	0	0	43	0	0	290
CR-47C	19,303	8,312	6,969	1,204	23	656		16		45	۰	2,072
CH-548	17,803	8,928	2,480	72	970	516	20	23	1	0	209	4,584

TABLE 3 **
SUMMARY OF AIRFRAME AND ENGINE CIR DATA*

	(1) Airframe	(2) Engine
Labor	62.08%	40.85%
Material	37.92%	59.15%
Total Cost	100.00%	100.00%
Raw Material	41.88%	7 0.58%
Purchased Equipment	<u>58.12</u> %	29.42%
	100.00%	100.00%

- (1) Airframe factors were obtained from a sample of 15 CIR reports representing the AH-1, CH-47, CH-54, OH-6, and OH-58 aircraft systems.
- (2) Engine factors were obtained from a sample of 14 CIR reports representing 11 different turbine engine configurations procured from Lycoming, Allison, General Electric, and Pratt & Whitney.

^{*}As adjusted by Labor and Material price movements.

^{**} From HISTORICAL INFLATION INDICES FOR ARMY AIRCRAFT U.S. Army Aviation Systems Command, St. Louis, 1974, p. 11.

TECHNICAL SECTION

- IV. ANALYSIS: (TECHNICAL SECTION).
- A. Chronology. Previous efforts related to the development of inflation indices include Aerospace Price Indexes by H.G. Campbell, RAND Corporation, December 1970 (Reference 1) and two Cost Research Reports: Historical Inflation Indices for Army Aircraft, Cost Analysis Division, Office of the Comptroller, US Army Aviation Systems Command, September 1973 (Reference 4), and Historical Inflation Indices for Army Aircraft, Cost Analysis Division, Cffice of the Comptroller, US Army Aviation Systems Command, August 1974 (Reference 5).
 - 1. Characteristics of the RAND Report.
- a. Specific <u>Producer Prices and Price Indexes</u> (Reference 8) and <u>Employment and Earnings</u> (Reference 2) data have been selected as proxy series for similar commodity and labor categories experienced in the procurement of Army aircraft. Aircraft inflation indices are constructed from a weighted average of these proxy series. The weighting factors for this average are derived from estimates of the relative contribution to the total aircraft cost made by each component (commodity or industry labor group) comprising the index. The index is thus a "cost-weighted" series.
- b. A 2½ percent compounded annual rate for growth of overhead ratios is assumed.
 - c. No adjustment is made for productivity increases.
 - d. Indices are developed on a Calendar Year basis.
- 2. Characteristics of the September 1973 Cost Research Report.

- a. As with the RAND Report, aircraft inflation indices have been constructed from a weighted average of <u>Producer Prices</u> and <u>Price Indexes</u> and <u>Fmployment and Earnings</u> data selected as proxy series for their similarity to those commodities and labor categories experienced in the procurement of Army aircraft. Weighting factors are proportional to the relative physical weights or masses, rather than the relative costs (as in the RAND Report), of commodities comprising the "composite material" portion of the index. Thus, the "composite material" portion of the index represents a "weight-weighted" series.
- b. Like the RAND Report, a 2½ percent annual growth in the overhead ratio is assumed.
 - c. No adjustment is made for productivity increases.
 - d. Indices are developed on a Calendar Year basis.
- e. For years for which certain specified Producer Price Indexes were unavailable, data has been projected from adjacent years.
- 3. Characteristics of the August 1974 Research Report.
- a. As before, Producer Prices and Price Indexes and

 Employment and Farnings data have been selected as proxy series

 most similar to those commodities and labor categories experienced

 in the procurement of Army aircraft. The indices have been

 constructed from a weighted average of these proxy series

 utilizing the weighting factors used in the September 1973 Cost

 Research Report. The "composite material" portion of the index

 represents a "weight-weighted" series.

- b. Unlike RAND and the September 1973 Cost Research Report, no adjustment for overhead growth is assumed.
 - c. No adjustment for productivity increases is assumed.
- d. Indices have been extended to FY 1974 by assuming that data for the September 1973 Cost Research Report represented December and hence the Fiscal Year midpoint, rather than the annual average, of each calendar year.
- e. For years for which certain specified Producer Price
 Indexes were unavailable, data has been projected from adjacent
 years.
- B. Data Sources. Data sources for this report are Producer Prices and Price Indexes (reference 8) and Employment and Earnings (reference 2). To insure that the latest revisions were incorporated into the data base, data was obtained from the Bureau of Labor Statistics Information Center, and Annual Supplements to the Producer Prices and Price Indexes. For Employment and Earnings, data for any given month was obtained from the latest available source. Data used in this report are displayed in Appendices D, E, G, and H.

C. Methodology.

1. Overhead and Productivity Adjustments. On the basis of data covering a ten year period, the RAND Report concluded that there exists a secular growth trend of 2½ percent per year in the production overhead rate. The report also concludes that there has been little, if any, improvement in productivity to counteract the observed trend in overhead growth. This conclusion appears to

be unwarranted, particularly in light of productivity gains recorded (as measured by Industrial Production Indices) for similar sectors of industry. Thus, in order not to unduly bias the results of the analysis, this report makes no adjustment for either overhead growth or improvements in productivity.

- 2. Revision of Weighting Factors. From a number of Cost Information Reports, the following weighting factors were developed and reported in the September 1973 Cost Research Report. For the Airframe:
 - (.378) Raw Material + (.622) Labor 3723,9 (3728) = Purchased Equipment
 - (.582) Purchased Equipment + (.418) Raw Material
 = Total Material
- (.378) Total Material + (.622) Labor 3721 = Total Airframe
 For the Engine:
 - (.599) Raw Material + (.401) Labor 3723,9 (3728) = Purchased Equipment
 - (.295) Purchased Equipment + (.705) Raw Material = Total Material
 - (.599) Total Material + (.401) Labor 3722 (3724) = Total Engines

And for Avionics:

(.315) Material + (.685) Labor 3674,9 (367x) = Total Avionics

In the previously published indices, the weighting factors used
to develop the material portion of the indices were made
proportional to the relative physical weights of the various
commodities used in the construction of the aircraft. The
material portion of these indices thus represent a "weight-

weighted" series. In order to be consistent with the intended purposes of an inflation index, the methodology in this program uses index weighting factors proportional to the numerical products obtained from multiplying the relative physical commodity weights by the appropriate base year cost per pound. This yields a "cost-weighted" index giving more weight to such expensive commodities as titanium. Unfortunately, however, price per pound data are not published in Producer Prices and Price Indexes for each of the commodities used in constructing the indices. To overcome this difficulty, the per pound price is estimated from the available data of the most closely related commodities. To minimize the effect from related commodities which have relatively little economic impact, each price per pound estimate has been developed from a weighted average of available data utilizing the Bureau of Labor Statistics 1975 revised relative weights published in the 1975 Annual Supplement to Producer (Formerly Wholesale) Prices and Price Indexes. The available data then constitutes a weighted sample from which a surrogate price per pound is computed for the Producer Price series in question. See Appendix A for the Computations for the Derivation of these Revised Weighting Factors, along with their associated cost contribution per pound.

3. Construction of Indices.

a. Calendar Year 1967 has been taken as the base of these indices because this year represents the approximate midpoint of the period(1958 - 1980) for which the data supports the develop-

ment of each of the indices, including those which account for avionics. Furthermore, 1967 conforms to the base used by the Bureau of Labor Statistics for Producer Price Indexes.

- b. Appendix B contains the current Producer Price Index series, Earnings series, and the associated weighting factors used in the construction of the indices published in this report. Since some of these series have been in existence for only a limited time, other closely related series have been substituted with appropriate mathematical adjustments to insure continuity of the indices. This technique is considered preferable to the synthesis of data by projection from adjacent years. Appendix C depicts the historical flow and identifies the effective dates of series conversions, for the Producer Price Index and Earnings data used in the development of the indices published in this report.
- c. The term "aggregate" has been selected to indicate inflation indices applicable to the combined Airframe and Engine (aggregate Air Vehicle Excluding Avionics) and to the combined Airframe, Engine, and Avionics (Aggregate Air Vehicle Including Avionics) to avoid confusion with the term "composite" as in "composite escalation indices". Aggregate indices are based upon a standard 70-20-10 weighting (see Reference 6) of the Airframe, Engine and Avionics Indices respectively. Aggregate indices are intended for the adjustment of historical cost data for which the distribution of costs for the Airframe, Engine, and Avionics components is unavailable.
 - d. A new section depicting the raw material portion of

the inflation indices is published as Appendix I. It is intended for applications requiring greater accuracy. Appropriate labor indices can be obtained from the Bureau of Labor Statistics Employment and Earnings series (Reference 2) as follows:

Labor Category	1967 SIC Code	1972 SIC Code	Industry
Airframe Contractor	3721	3721	Aircraft
Airframe Subcontractor	3723,9	3728	Other aircraft part & equipment
Engine Contractor	3722	3724	Aircraft engines & engine parts
Engine Subcontractor	3723,9	3728	Other aircraft parts & equipment
Avionics	3674,9	367X	Other electronic components
Aggregate Air Vehicle Excluding Avionics	372	372	Aircraft and parts

- e. The basic Computational Methodology is as follows:
- (1) For Components: Airframe, Engine, and Avionics.
- (a) Calendar Year indices are computed using sum of weighted calendar year labor and material indices.
- (b) Fiscal Year indices are computed in a manner similar to Calendar Year, but the yearly fiscal averages are generated from the monthly data.
- (c) Quarterly Indices are computed by averaging three months data from the monthly data set.
- (d) Monthly indices are computed by direct calculation using monthly data. It is a weighted average of monthly figures computed using the same methodology as in computing the Calendar

Year indices.

For additional information, see Appendix B.

(2) Aircraft System Cost

The inflation indices for "Aggregate Vehicle" and Aggregate Vehicle without Avionics" are produced by combining the three separate indices:

Component	Relative Weight
Airframe Index	70%
Engine Index	20%
Avionics Index	10%
Aggregate Vehicle	100%

Component	Relative Weight w/o Avionics			
Airframe Index	78%			
Engine Index	22%			
Aggregate Vehicle without Avionics	100%			

b. Reduced form equations are displayed in Appendix B, pageB-3.

$$(.7)$$
 \vdots $(.2 + .7) = .78$
 $(.2)$ \vdots $(.2 + .7) = .22$
 1.00

V. DESCRIPTION OF COMPUTER PROGRAM AND ASSOCIATED APPENDICES.

The Historical Inflation Program is a computer program used to generate historical inflation indices for Army aircraft and their major subsystems. Appendices D and G contain the annual data used by the program, while the monthly data, commencing July 1967, are in Appendices E and H. Producer Price Index and Earnings data in these Appendices have been arrayed into columns with the same numerical code sequence used in Appendix B. Historical inflation indices and factors are published in Appendix F. Fiscal Year, quarterly, and monthly indices have been developed from the appropriate monthly data. A section containing the raw material portion only of these indices is published as Appendix I. The labor portion of these indices may be obtained by applying the methodology described on page B-2, bottom of page, to the data contained in Appendices D and E.

VI. SENSITIVITY ANALYSIS

Many considerations are important when constructing Historical Indices for tracking purposes. These certainly include the following:

- a. The nature of the items chosen to comprise the index.
- (1) How typical or representative the items are.
- (2) How closely the proxy items approximate the actual items, if indices for the actual items are not obtainable.
- (3) The number of items used, and the detail in the analysis which produced the indices.
- b. The determination of the percent contribution to cost "Cost Drivers".
 - c. The weighting factors employed in the overall analysis.

A difficult problem confronting cost analysts, who must determine the validity of an historical index for tracking purposes, relates to aggregate labor/material weighting factors. In tracking major weapons systems, the ratio is often stated as say 40/60 - that is 40 percent material and 60 percent labor - as percent contributions to cost. Because it is difficult for analysts to determine the "correct" aggregate mix of labor and material, being external to the project, the aggregate split is certainly of interest.

The value for any index depends on three factors:

- a. The number of factors employed, and the quality and depth of the analysis.
- b. The values for each component of cost used in the construction of the index.
- c. The weights, or levels of importance, given to the factors, individually and collectively.

The objective of this sensitivity analysis is to shed some light on the way in which the aggregate labor/material split affects the index, which has been a controversial issue for some time. Using a set of recursive linear equations, the effect on the historical inflation index, for airframe resulting from varying the aggregate weighting scheme was calculated, in both raw and percentage terms. The calculations were made using a Wang system 2200 minicomputer, and a sample printout follows. The results provide evidence that the key to a successful index resides in item (1), the number of factors employed, and the quality and detail in the analysis used in preparing the index. Because wages are often tied to the Producer Price Index, or other price indices, in labor agreements, it is not surprising that aggregate weighting percentages for labor and material might not be an extremely sensitive issue. However, the calculations provide strong support

for the position that the identification of cost components and the depth and quality of detail in an analysis are of paramount importance, when developing an index to be used in controlling the cost of a major weapon system.

---- EXAMPLE ----

****** SENSIIIVIII HNALYSIE *******

(BENSITIVITY OF AIRFRAME INDEX TO CHANGES IN GROSS WEIGHTING FACTORS)

CALENDAR YEAR 1978

GROSS MATL	GROSS LABOR	HURE MATL	PURE LABOR	NEM INDX	CURR INDX	PERCENT CHANGE
373	. 6220	2411	7588	2 1471	2 1470	9 . 99
State.	3688	1068	\$93 <u>0</u>	2 1659	J. 1470	ම, මහ
256	. 7500	1408	. 8591	2. 1611	2. 1470	ව ප්ස
ী ক ্ষ্	. 7000	1777	. 8223	2. 1559	2. 1470	o 41
258	. 6500	2175	7824	2, 1504	3 1470	Ø 15
400	. 6000	. 2603	7396	2. 1444	2. 1470	- 012
458	5500	3 059	. 6949	2. 1380	2 1470	- Ø. 41
ଅଧିତ	5999	3545	6455	2 1313	2. 1470	- 0 .73
. 550	4500	. 4059	. 594ผ	2. 12 39	2 1470	- 1, 07
සමම	4000	4603	539 6	2. 116 Y	2 1470	- 1.42
සිටුම	3500	5175	. 4824	2. 18 83	∆ <u>1</u> 470	– 1 , ਫਰੋ
20ක	2009	. 5777	4223	J 0998	2, 1470	- 2 19
Ptop	2560	. 6408	3591	2 8918	2 1470	- 2,60
21010	. 2000	al Hitter of	. 2951	2. 0817	2. 1470	- 3 03

510 2721 - 7.700 510 2723.9 - 6 920 NEW MAT IND = .4920

VII. REFERENCES.

- 1. Campbell, H.G., Aerospace Price Indexes. Santa Monica, CA: The RAND Corporation, R-568-PR, December 1970.
- 2. Employment and Earnings. Washington, DC: US Department of Labor, Bureau of Labor Statistics
- 3. Field Manual 101-20, Army Aviation Planning Manual, Washington D.C.: Headquarters, Dept of the Army, January 1979.
- 4. Historical Inflation Indices for Army Aircraft.
 St. Louis, MO: US Army Aviation Systems Command, Office of the Comptroller, Cost Analysis Division, September 1973.
- 5. Historical Inflation Indices for Army Aircraft.

 St. Louis, MO: US Army Aviation Systems Command, Office of the Comptroller, Cost Analysis Division, August 1974.
- 6. Letter, subject: Historical Cost Inflation Indices for Army Hardware and R&D Costs. Washington, DC: US Army Materiel Command, 26 October 1972
- 7. Memorandum, subject: Material Composition Analysis of US Army Helicopters. St. Louis, MO: US Army Aviation Systems Command, Office of the Comptroller, Cost Analysis Division, 31 July 1973.
- 8. Producer Prices and Price Indexes. Washington, DC: US Department of Labor, Bureau of Labor Statistics.
- 9. World Combat Aircraft Directory. Garden City, NY: Doubleday and Company, Inc., 1976.

VIII. BIBLIOGRAPHY.

- 1. Hibdon, James E., <u>Price and Welfare Theory</u>. New York, NY: McGraw-Hill Book Company, 1969.
- 2. <u>International Financial Statistics</u>. Washington, DC: <u>International Monetary Fund</u>, <u>Monthly</u>.
- 3. Letter, subject: <u>Inflation Guidance</u>. Alexandria, VA: U.S. Army Materiel Development & Readiness Command, Office of the Comptroller, Cost Analysis Division, 3 Sept 1980.
- 4. Measuring Price Changes of Military Expenditures. Washington, DC: US Department of Commerce, Bureau of Economic Analysis, June 1975.

APPENDIX A Computations For The Derivation Of Revised Weighting Factors For The Historical Inflation Program

COMPUTATIONS FOR THE DERIVATION OF REVISED WEIGHTING FACTORS FOR THE HISTORICAL INFLATION PROGRAM

Weighted ⁴ 1967 Price Per Pound	.2376	.0737	.5531	.0497	.14	.3595	.4185
Product 3	.001585 .001793 .004097 .003822 .003 .008199 .004671 .002228						
Weight ²	.006 .009 .021 .020 .020 .020						
1967 Price Per Pound	.2642 .1992 .1951 .1820 .25 .41 .2224 .2476	.0737	.5531	.0497	. 14	.3595	.4185
Commodity	RUBBER AND PLASTIC PRODUCTS Latex No. 1 Ribbed Smoked Sheets No. 2 Ribbed Smoked Sheets No. 3 Amber Blanket Butyl, Regular Neoprene, GN Type Styrene Butadiene, Hot Polybutadiene, Non-Staining Whole Tire Reclaim	SHEETS, C.R., CARBON	SHEETS, C.R., STAINLESS	STEEL CASTINGS CLOSED DIE FORGINGS Ingot Molds	LEAD, PIG, COMMON	MAGNESIUM, PIG INGOT	ALUMINUM SHEET
PPI CODE	07 11 01 01 02 03 04 02 11 12 13 15 03 21	10 13 02 62	10 13 02 64	10 15 01 41 10 15 01 53 10 15 01 11	10 22 01 11	10 22 01 51	10 25 01 01

Weighted Weight Price Commodity Per Pound Weight Product Per Pound	ROD, SCREW, MACHINE STOCK .6315 .6315	EXTRUSION, SOLID CIRCLE SIZE 4 TO 5 Rod, Screw, Machine Stock .6315	COPPER AND BRASS MILL SHAPES Cartridge Brass Strip, 70-30 Alloy .6033 .121 .073 Yellow Brass Rod (62-35-3 Alloy) .4602 .082 .03774 Yellow Brass Tube (70-30 Alloy) .7841 .048 .03764 Copper Sheet or Strip .6924 .108 .07478 .359 .22316		MONEL SHEET, CR 400 ALLOY 1.3752 1.3752
	SCREW, MACHINE STOCK	NUSION, SOLID CIRCLE SIZE 4 Screw, Machine Stock	PER AND BRASS MILL SHAPES rridge Brass Strip, 70-30 A LOW Brass Rod (62-35-3 Allow Brass Tube (70-30 Alloy ber Sheet or Strip		
	10 25 01 13 ROD, 3	10 25 01 17 EXTRUG 10 25 01 13 Rod, 3	10 25 02 31 Cartr: 32 Yellov 33 Yellov 55 Copped	10 25 04 63 MONEL	10 25 05 TITANIUM MILL

Weight is Bureau of Labor Statistics Revised Relative Weight for the Wholesale Price Index. Source: 1975 Annual Supplement to Producer Prices and Price the Historical Inflation Program. Indexes. 2

Capitalized and Underlined Commodity Titles indicate PPI Series actually used in

NOTES:

Product = $(1967 \text{ Price Per Pound}) \times (\text{Weight})$. ж •

Weighted 1967 Price Per Pound = Product Weight 4.

A 3

NOTES (Continued):

1967 Titanium Far Price Per Pound computed by utilizing Titanium Sponge index as surrogate for 1967 - Dec 1970. Titanium Mill Shapes index established December 1970. Titanium Sponge index for December 1970 is 95.5. δ.

Figures may not sum due to rounding.

COMPUTATIO REVIS FOR THE HIS	COMPUTATIONS FOR THE DERIVATION OF REVISED WEIGHTING FACTORS OR THE HISTORICAL INFLATION PROGRAM	DERIVATION G FACTORS LATION PRO	N OF DGRAM			Jeoo o Sactors &	sionofi g
	contrib.	, i		contr.	contr.	ני ב ענינו	ŭ[]ŭ
	to	to	/961	cost	cost	are St	[8]:
	weight	weight	COST	per 1b.	per 1b.		
Commodity	Airframe	Engine	Per Pound	Airframe	Engine	Airframe	Engine
Rubber and Plastic Products	.17	.012	.2376	.04039	.00285	. 6211	.0023
Sheets, C.R., Carbon	.055		.0737	.00405		.0021	
Sheets, C.R., Stainless		.584	.5531		.32301		.2625
Steel Castings .	. 22		.0497	.01093		.0057	
Closed Die Forgings		.146	.0497		.00725		.0059
Lead, Pig, Common	.01		. 14	.0014		.0007	
Magnesium, Pig Ingot	.033	.077	.3595	.01186	.02768	.0062	.0225
Aluminum Sheet	.256	.021	.4185	.10715	.00879	.0560	.0071
Rod, Screw, Machine Stock	.043	400.	.6315	.02715	.00253	.0142	.0021
Extrusion, Solid Circle Size 4 to 5	.128	.01	.6315	.08083	.00632	.0422	.0051
Copper and Brass Mill Shapes	. 049	.005	.6216	.03046	.00311	.0159	.0025
Monel Sheet, CR 400 Alloy	.011	.122	1.3752	.01513	.16777	. 0079	.1364
Titanium Mill Shapes	. 025	010	5.2926	.13231	10056	.0691	.0817
	1.000	1.000		.46167	.64986	.2411	.5281

Revised Weighting Factors Proportional to Cost Contribution Per Pound. Previous Weighting Factors expressed as a proportion of "composite material" index. Revised Weighting Factors expressed as a proportion of the total index. Previous Technical Report (TR 76-1) omitted nickel component (represented by Monel Sheet) from Engine index. NOTE

COMPUTATIONAL FORMULA

11 (RELATIVE IMPORTANCE OF MATERIAL (RAW) IN OVERALL INDEX) Adjustment Factor For × 1967 COST Æ × PREVIOUS WEIGHTING FACTORS CONTRIBUTION TO MEIGHT:

AIRFRAME & ENGINE WEIGHTING FACTORS

53 11 51 01 13

0

PPI Code

APPENDIX E
Wholesale Price Indexes And Earnings Series
Used In
Historical Inflation Program
With Revised Weighting Factors

PRODUCER PRICE INDEXES AND EARNINGS SERIES USED IN HISTORICAL INFLATION PROGRAM AND REVISED WEIGHTING FACTORS

Remarks		
Avionics		.6850
Engine	.2625 .0059 .0225 .0071 .0021 .0051 .1364	.4010
Airframe	.00211 .0021 .0057 .0062 .0560 .0142 .0142 .0159	.6220
Commodity	Rubber and Plastic Products Sheets, C.R., Carbon Sheets, C.R., Stainless Steel Castings Closed Die Forgings Lead, Pig, Common Magnesium, Pig Ingot Aluminum Sheet Rod, Screw, Machine Stock Extrusion, Solid Circle Size 4 to 5 Copper and Brass Mill Shapes Monel Sheet, CR 400 Alloy **	Electronic Components Industry Other Electronic Components Aircraft Aircraft Engines and Engine Parts Other Aircraft Parts and Equipment
PPI Code	07 10 13 02 62 .04 10 13 02 64 10 15 01 41 .05 10 22 01 11 10 25 01 01 .02 10 25 01 01 .02 10 25 01 13 .02 10 25 01 63 10 25 04 63	11 78 SIC Code 3674,9 (367X) 3721 3722 (3724) 3723,9 (3728)
Var	(1) (2) (3) (4) (6) (6) (10) (10) (11) (12)	(14) (15) (16) (17) (18)

COMPUTATIONAL FORMULAS : Labor Cost Indexes

The dollar to percentage conversions for the labor categories are The data concerning cost of labor services is supplied by the Bureau of Labor Statistics, pressed in dollars/hour, labor cost must be converted to a percentage (index) before cal-Employment and Earnings. Because the material indices are percentages, and wages are exas hourly wage rates by Standard Industry Codes, and is reported on a regular basis in culations can be made. made as follows:

	INDEX	INDEX	INDEX	INDEX
	× 100% =	= %001	x 100% =	x 100% =
	×	×	×	×
1967 Hr. Wage	2.34	3.49	3.42	3.35
叫	+		.∤.	{·
	Current Hr. Wage	Current Hr Wage	Current Hr. Wage	Current Hr. Wage
Industry	Other Electronic Components	Aircraft Production Workers	Aircraft Engines and Engine Parts.	Other Aircraft Parts and Equipment.
SIC Code	3674,9 *(367X)	3721	3722 #(3724)	3723,9 *(3728)
	(15)	(16)	(17)	(18)

* After Cy 78, Bracketed Code Replaces Code Directly Above It.

REDUCED FORM EQUATION

Airframe =
$$.0211 (V-1) + .0021 (V-2) + .0057 (V-4) + .0007 (V-6)$$

$$+.0062 (V-7) +.056 (V-8) +.0142 (V-9) +.0422 (V-10)$$

Engine = .0023
$$(V-1) + .2625 (V-3) + .0059 (V-5) + .0225 (V-7)$$

B 4

DATA/DEVELOPMENT

- Calendar Year Data As given on printout. (٦
- Monthly Data As specified on printout. (5)
- Quarterly Data Development from Monthly. (3)

Quarterly =
$$[(Month_{T-1}) + (Month_T) + (Month_{T+1})] / 3$$

Fiscal Year Data - Developed using appropriate quarterly data. Ω4 + (4)

Fiscal Year Average =
$$Q_1 + Q_2 + Q_3$$

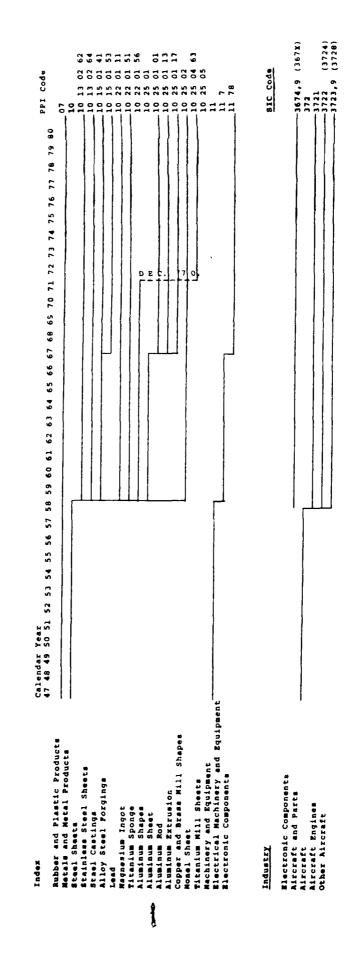
(Quarters of Fiscal Year)

Variables specified on preceding chart.

APPENDIX C

HISTORICAL FLOW OF WHOLESALE PRICE INDEXES AND
EARNINGS SERIES USED IN HISTORICAL INFLATION
PROGRAM WITH PEVISED WEIGHTING FACTORS

Historical Flow of Producer Price Indexes and Earnings Series Used in Historical Inflation Program



APPENDIX D

Annual Data for The Historical Inflation Program for U. S. Army Rotary Wing Aircraft

.	(313)											すま	55	+9	20	80	69	98	90	21	35	53	76	99	12	37	99	r) O	32	5.96	42	92	46	į	. •		
LABOR PATE DATA	17) (.51 2.44									3,42 3,35									6.52 5.							
BOR &	(15) (16) (17)														2.78 2	2,87 2	3,95 2	5.00 3	5,15 5	5.34 3	3,49 3	5.64 3	3,90 3	+.17 4	+ 36 +	+ +L.+				6.62 6			8.50 8				
ک.	(15)											.71	1.77	1.86	1.93	1.97	2.01	2.09 Z	2.14	2,21	2.34	2.49	2,61	2.78	2.91	3.02							5.35				
												96.64	17.50	96.20	96.20	96.70	95.70	55.10	95,10	97.70	100.00	29.20	100.10	101.00	102.40	103.40	104.40	111.40	115.50	115.80	119,50	126.90	135,80			(14)	
Œ.												149.30	122.40	117.90	108.10	101.00	97.30	97.30	54.80	100.00	100.001	49.30	98.00	95.50	102.90	107.00	109.20	132.50	168.80	171.80	170.20	173,10	211.40			(13)	
RYEA												70.50	76.50	07.10	04.66	91.00	51.60	5.0 . 6.0	00.0%	02.46		105.20	114.20	154.10	134.70	140.40	140.00	173.50	219.60	0		263,40	310.40			(12)	
NDAF	⋖											74.10	20.60	01.10	75.00	73.50	75.40	78.50	80.10				112.4			124.50				163.90		171.00	210.30		•	(Π)	
CALE	D A T	:										131.00	100.00	110.09	111.50	1:8.70							112.00					10.0.90	1:7.00	162.90	211.50	-	255.10			(10)	
UAL												161.0	100.10	116	111.00	103.13	166.00	101	24.04		1300		71.				7 + C 7	160.00	147.	155.10	162.00	174	151.60			6)	
N												101.fv	106.00	110.60	111.30	164.70	162.0	101.40	7.		3 H 3 P D 5	04.511	10-4-71	110.60	11:16 . 7J	1		1, · · · ·			200.00	135.65	245.20			8	
												100.00	100.001	10.00	100.00	100.00	140.00	100.001	16.004		100.16		100.10	100,00	162.76	105.20	106.40	17 5.20	261.10	44.5.	211.00	11.6/7	2,44,30			6	
												.00	17.61	•	17.6.3	00.	73.00	17.60	114.30	4.7.60	36. br 1	36.91	U 3 4 13 F 1	112.10	34.00	101.01	117.03	1,74,10	3.1.	103.1	617.13	53.07.	3/10,04		•;	(9)	
:	BEFORE '58		REE	INPLITS	· >>	;						15.20		: • • • • • • • • • • • • • • • • • • •	37.	-7.	.7.	/ • 1	04.		1.6.			127.14	166. 10				191.	215.0			C 31.			(2)	
	BEFO		Ξ	_	. ?	5 ,						43.63	45.40	73.66	6.7.60		.1.	17.1.	40.11		1 30.00	105.70	5 m · 5 T r	114.0	17.5	1:3.63	142.29	163.50	1 1000	216.50	07.465	2-7-50	26.11			(4)	
~	1.572	1.457		1.03/	1.700	1.390	つかがって	2.070	2.160	2.270	2.350	125.76	121.50	143.20	113.60	115.40	107,00	14.40	91.40	91.00	100,001	101.10	112,50	130.90	155.00	120.43	122,10	157.10	165,30	168.00	197,10	197.80	214,80			3	
7	54.9	9	F. 3 . I	000	73.0	73.1	76.3	76.3	92.1	39.5	-11.	95.19	34.73	74.73	24 . 7 u	34.70	36.93	44.00	3.3.10	P. •	100.00	104.70	107.33	116.40	127.40	134.50	135.50	157.60	139,50	<05.03	250.00	255,90	282,20			3	
-	70.5	7: 0	Λ. Σ.	٠	÷	(1 ° f	7.00	# (UD)	*	*	5.50	66.37	01.	07.4.	05	38.	٥, ٠	. y.	63.7), ()		11.7.1.0		30.		•	(1)	
				Ų	-		~	_	_					٠.								•	• •	4	-	~	~	-4	• •		~		•	,			

MATERIAL COST DATA

APPENDIX E

MONTHLY DATA FOR THE HISTORICAL INFLATION PROGRAM:

⋖ α ш

۲ 16 17 18 ACFT ENG OTHER 3721 3722 3723.9 4.01 ELECT 3674.9 -- LAUR-3 1176XX ELECT 13 2505XX 1 TI.MIL E 11000 250463 MONEL 102.60 125.90 123.10 118.80 115.20 115.20 112.60 124.00 99.10 152,40 124,60 94.90 23011/ 102562 1 ATRO CP/BRS 250115 20117 250115 20117 50-518 14780 117,40 117,40 117,20 117,60 119,40 121,50 121,70 lle.bu 121,90 121,90 121,90 121,90 114,10 101.00 101.00 101.00 40.20 86,24 86,24 96,24 90,56 35.46 95.40 07,40 44,40 41,40 43,40 95.40 69.80 1 253101 4, 143 110,00 110,00 110,00 110,00 110.60 110.60 110.60 119,60 110,60 110,68 110.50 110.60 110.60 110.60 110.60 109.60 110.6: 100.001 100.001 100.001 100.001 100.001 1116.00 1100.00 1100.00 1100.00 1100.00 1100.00 1100.00 1100.00 133.00 133.00 130.00 130.00 130.00 130.00 130.00 130.00 130.00 130.00 105,60 103,60 103,60 105,60 100,001 100.01 103,66 103,66 193,66 10.61 190,00 1.10.1 104.00 104.00 105.00 100.00 100.00 100.30 100 1 0.3.c. 0.4.c. 12.c. 12.c. 3.c. U: • 46 100.00 100.00 103.50 105.50 70.43 107.10 103.40 96.40 100.00 100.00 100.00 100.00 100.00 100.00 131.40 100111 10011 10011 10011 100111 10011 10011 100111 100111 100111 100111 100111 100111 100111 100111 100111 11.1455 Funde 144.30 125.00 125.00 131.40 11 ... 36 121.70 164.36 11.0.11 11 . 36 11.3,40 11,000 11 1,50 110. co. 115. co. 116. co. 117. co. 117 104.00 134.59 179.59 110.59 Inul41 Casl 103.00 103.00 105.30 102.20 102.20 103.40 105.40 105.40 105.40 165.20 165.20 165.20 105.20 994.10 94.10 33.10 105.20 105.20 104.10 103.30 1 150 7 71 107.30 113.10 112,30 112,90 119,40 119,40 119,40 119,40 119,40 115,10 115,10 119,43 119,40 ć, 119.40 112,30 112,30 119.40 3 367x 02.40 04.00 1.19.110 PACUL 7JUCC 71GA 1 71FL 1 71AA 1 71AP 1 838.14 875E 673.1L 67A.13 97SEP 630CT . . AUNE 9 70.00E 70.80E 70.80E 70.00E 1 1101 E 2

MONTALY DATA FOR MATERIALS

LABOR RATES

							•							: :	9000			1	
; ; ;	: -		,	:	1 4 1 -2 1 4		- - - !		9			71	?		õ	9		91	
× → /1	007x Justr	130.57 CR 5F	100 Jenes 100 Je	1417	100100 Funda	1176.53	4.0.1331	20/110i	113 514	256117 EX180	10,502 CP/ERS	463 EL	3XX HIL	1173XX ELECT	ELECT 367419	ACFT E 3721 3	ENG 0	THER 723.9	FY
•	1		,	1				i	1 1 1 1	1	1		-	1 1 1				1	
_	04.40	127.40	131.11	() 	-	101.5		lea. é.c.	3		ۍ د	0 4 0	05.7	02.8	8	+1	•	18	ત્ય
_	0.00	1.7.40	1 1	12.7	-	101			3		7.7	0,40	15.7	02.6	6	£15	•	.17	~
_	19.50	127.40	137.1	921	<u>-</u>	101.1	100,001		3.4	٠.	7.7	0 * * 0	03,7	02.5	•	94.	•	. 26	~
•	J4.50	124,10	13/01	7	13	101.1	•	•	±	ì., 5	7.1	0 * * 0	03.7	02.4	•	* t	•	.22	~
_	19.60	134,50	1.57.1	1.7	123	1.13.0			4.4	1.6	1.6	0 * * 0	06.8	03.4	٠,	58	•	-28	~
_	Jr JL	154. 10	13.10	7	163	1.1.1			5.4	1,0	5.4	0 * 0	07.1	03.4	2.	• 64		.30	æ
_	JA. 70	134.00	15:41.	1:1	10	110.7	•		4.5	3.1	5.5	0 * * 0	07.1	03.2	٠.	7.4		.33	~
_	00.00	154,50	1 10.1	1 = 7	-	112.5			7.	23.6	5.5	0 * * 0	07.4	0.40	٠.	.72	•	. 36	~
1 1102	U4.97	134,50	120.40	121	1,	112.5			4.5	23.8	5.3	0 * 0	07.4	03.9	•	.72		.36	~
4 1	6.2.6	154,00		15.	1:1	114.			4.	25.0	23.5	0,40	4.70	0.40	٦.	9	•	34	ю
-	3.6	134.50	117.11	150	1:1	11.4.			*	23.4	23.5	0.40	4.70	03.7	0	11		.39	ĸ)
	30.00	134,76	117.	1.50	1:1	110./	•		3.4	23.4	25.3	0 7 0	4.70	03.3	•	.79		のす。	ю
JOCK 1	34.50	154,50	117.5	139	1.51	110.7			3.4	23.3	25.1	0 * * 0	07.4	05.2	0	*0		**	m
7 7 7	D#. 61	134.50	117.5	150	7:1	Luder	Ċ		3.4	23.0	25.7	04.0	4.70	03.2	0	.97	•	64.	n
_	00.61	134.50	117.5	1.40	152	168.3	60	•	3.4	25. B	6.52	04.0	4.70	03,3	0	ð	•	.51	m
37-75	10.03	134,50	117,50	1:0	2	100.9	Ŧ.		5.4	23.0	26.5	0,00	07.4	03.6	•	66.	•	52	m
2F L	17,11	134.23	117.50	1.53	1.5	114.7	Ş	•	J. 0	23.3	7.9	0.40	۲.4	03.6	٠.	ŧ.	. 9 . 9	ŝ	n
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7) , , (1)	154.55	117.00	10.1		114.5	1.12.40	60	3,4	25.0	37.0	47.80	07.4	03.7	٦.	ţ0.	\$.55	m)
SAP4 1	0.00	134,50	117,50	152	1.5.1	114.5	ž	ţ.	\$.	23.€	38.5	9.80	07.1	0.40	7	.03	.95	5	M
Sary 1	11.50	134,50	125.4	132	153	110.1	٤	*	4.5	25.5	41.9	47.80	±.90	* * O	٦.	90.	8	-8-	~
נייורני	U (• >)	134,50	124.51	2	100	117.4	100.00	, ,		ر د د د د د د	42.1	49.8	08.2	04.5	٦.	6	•	29:	m .
1 7 7 7	06.71	134.50	124°5	77	<u>``</u>	117.	<u>.</u> د	•	÷.	ى ئ	1.6	ر د	80	9. 40	7	8	. 0	99	
1 (1 . v)	9.10	154.50	124.1	1.53	٠, -	117.9	106.41	* *	. t	25.4	æ ;		60	9.50	7	17	•		* :
4 4 Jac	3	10.401	124		5	711	<u>ه</u> : د:	•	٠	25.6	10° 11	9 · 6 · 6	7.7.	9 + 10	Ņ	2 2	•	21	* :
- 3		157.00	7.7	0.4		7.71	o o	•	.	, c>	16.30	1	. .	20 C	ď.	, e	•	=	• :
2.75		147.50	1	-			3 2	•		0.00	000	0 a	16.0	04.7	i.	, 4 , 5	•	į	
1 7 7 7	7.7	137.50		7	+ 1	100	115.00	· /	• •		200	49.6	14.7	, 7		36	• •	4	* #
4	13.E	137,50	14.021	+	1 + 6	155.7	٦,	17.	, D	34.0	65,40	49.8	14.7	90	3	4	•	8	*
1 14.6	3.03	142,03	1000	£ + T	1+4	155.7	5,		υ. Υ.	3e, 1	78.30	9.8	21,8	07.2	Ę	7	•	88	*
1 7 24 1	7	146.00	140.13		1+1	3.44	3.	۲,	T	∓. 1,•	00.68	49.8	21.8	08.3	٣.	9	•	. 89	.
T .	55.7.1	155.10	150.6	10 .	7	155.	3.	77	E	46.2	00.3	75.3	25.1	9.60	3	٠ د د	•	90.	#
		167,49	· .		ř.	15.00 1.15.00	ς:	· ·	٠. د		U.S. 7	5.3	4. t. c.	11.5	n:	7	•	.03	* •
						2.01) : :	•	V .	٠ ٧		0.0	00.70	7.21	*	7	•	9	n .
		160.50	17.				3/ 61 /	•	† 1		נים ניע	191.30		אט אינ	† 3	, 1 1	•	? ×	n k
1 1 204		של. ממן	. + / 1	-	. 7	1 7	208.1		4 2 . 2	, ,	919	71.3	51,70	100	. 3	2.5	• •	2	ı Kı
7		Les ent	17.	-	-	_	r		, , t	20	72.	91,3	51.70	16.8		63		18	ın.
•	(4.4)	190.00	17.	1.1	· -	175	2)	•	7.	62.3	63.5	91,3	51.70	17.0	S.	.87		.23	sc.
		1.9,19	/1	~	<u>.</u>	17.	764.16	•	7.	02.1	54,19	19.6	04.04	17.5	\$	93	•	.23	S.
	7	133,19	1	.: 	-	1/			٦.	₹.	56.00	19.6	65.40	17.0	9	16.		.29	ะ
-	() • ()	1.9.1.1	•		_	2				>0.0€	3.te()	19.6	2.20	16.6	٥	00.	•	.35	S.
		159.10	· · · · ·	-	•	1	\$	•	1.	3.6	0.50	7.0	00.4	16.3	۲.	.07	•	.39	'n
1 1 1		1-5.4	1,3.5	• • • • • • • • • • • • • • • • • • • •	; + · · · · · · · · · · · · · · · · · ·	-	11.00		7.	را د	0000	17.6	0.30	15.6	۲.	.12	•	.47	S
(.).	7	1.0.1	·	1 +2 + 4	17.40	-	:28.1t	-	7:	3	1.96	19.6	0.60	15.7	۲.	50	•	64.	Z.
1 14 f .	· • •	1.34.	76.0	11.11.	; ; ;	_	•		٠,	0.0	9. HO	13.0	1.60	15.0	Ð	. 22	•	• 26	9
.	•	· · · · · · · · · · · · · · · · · · ·	·	16.	1 47.6	7		-	7.5	ਾ ਹ	5.5	÷	1.80	15,1	٠,	56	•	.62	9
7 25 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	· ·	÷.	. • 	1.	7	f	11. 127	157.50	0 / * 1	1/1.00	147,10	619.toU	3	114.50	5.81	6.30 6	6,12	65	9.
	•	76.1	• •	• • • • • • • • • • • • • • • • • • • •	•	<u>+</u> ,		•	~• √	`.	`. =	5	υ.	6.9	\$	37	•	99.	•
 			•	-	•	<u>.</u>		-		ر • ر آ	151.	219.60	Σ : 	٠ ت	υ :	Ŧ.:	. 23	.77	.
·			•	•	•	7. • . •		_	`:	•)	·	•	5	٠ •	2	*	.	. 81	٥

OMTHLY DATA FOR MATERIALS

LABOR RATES

3723,9 FY 18 OTHER 3723.9 .07 \$\bullet \text{\$ 3722 17 ENG 16 ACFT 3721 ELCCT 3674.9 15 15 14 25054K 11784K 6 11.MIL ELECT (170.10 170.10 174.20 174.20 175.40 175.40 175.40 175.40 176.40 176.40 176.40 177.60 204.30 204.30 204.30 204.30 204.30 204.30 204.30 204.30 171.60 171.90 171.90 171.90 171.60 171.60 171.60 171.60 171.60 171.90 171.90 170.00 169.10 168.70 168.70 108.70 08.K9 169.60 262.60 262.60 262.60 262.60 272.00 272.00 272.00 272.00 272.00 272.00 272.00 272.00 272.00 272.00 273.00 356.70 356.70 356.70 363.70 241.50 241.50 241.50 241.50 262.60 220463 262,60 MONE CP/tsr5 10. . . . 1 15 150117 5.XIMU .32,00 153.cc 156.ec 157.ec 167.ed 167.ed 167.ed 167.ed 167.ed 107.66 170.46 175.10 175.10 175.10 175.10 175.90 175.90 177.90 177.90 177.90 2.14113 56. JA 150.00 150.00 150.30 157.60 135.00 135.00 1e7.50 192,10 192,10 192.10 192.10 195.30 150.cu 151.50 137.10 130.50 204.bd 2+3.20 245.KU 13.55 to:10.0 3.3.E. 00.00 503,20 503,20 503,20 503,20 :-223.40 221.40 223.40 233.40 7/1.45 271.40 255.73 446.00 426.00 414.00 414.00 404.00 514.5U 704.30 [40245 200 - 100 - 51. 12 551. 35 751. 35 751. 35 347.55 255.36 275.36 277.53 277.00 277.00 277.00 275.00 4.04 40.5.43 116.118 231. 14 373.000 6.59.20 70.39.20 70.39.20 775.00 6.15.00 6.14.16 7.14.70 7.14.70 00.4 172.41 175.51 175.51 175.55 175.55 175.55 175.55 201,13 200,74 200,49 200,49 06.405 <u>.</u> . 220.70 222.70 222.70 222.60 1.50 'n Ţ 203.00 600.13 <u>*</u> <16. 3 TANGER TO THE TA

F O R MUNTHLY DA MATERIALS

RATES

LABOR

			_	į	9	9	9	9	9	90
•	9	DTHER	8723.9 FY		60.0	8.18	8.24	8.31	* * *	6.51
	_	9	3722	Î	9.10	9.22	9.32	8 t . 6	9.62	9.61
;	16	ACFT (3721		9.38	64.6	9.59	9.74	9.81	9.65
	∵	ELLLT	3674.9		5,93 9,38 9,10 8,09 80	5,93	6.05	6.11	6.13	6.20
	÷.	1173XX	ELECT	1 1 1 1 1	153,40	155,30	157.00	158.10	158.20	160,80
	c:	2505XX	TI.MIL	1 1 1 1 1	784.60	784.00	265.00	<88.80	291,50	292,80
•	12	250463	MONEL		379.70	379.70	379.70	579.70	379.70	579.70
	=	192502	CHICKS	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	230.90	221.70	224.90	224.60	220.50	225.00
	٦.	250117	LATAL		290.20	01.01.	06.40	643.93	J.B. 3. 3.	04.40E
	-	c50113	SC. STN		U+, (Ú ,	0	სი•, ს/	02	236 00	υυ. c.u.;
	•	101107	14.1	1 1 1 1 1 1	247.7		5	: 1	247.11	2+7.7.
		1:17		;	12.2.2	30' 2 . ? .	322.7	34 71	70	320.71
	•	1116	1.6.4.1	1 1 1 1 1 1 1 1 1	0-1-0		11.35	7	(1.00	D. • 6 0 3 .
		1 155	1.11	1 1 1	354.5		JC * .+3 -	14 71	J 4 + 8	16
	7		7.4.		315.51	1 34.4.5	1. 680.1		7.1.	
	.,	F 774 E 9			50° 4000 e	3 · 1 / 5	, n	0 255.	0 751.0	u 251.
•	•	1.30	/ (3)	1	2 504.		0.400	U 24.7 U	C. 83. 0.	1. 682 6
-	~•	0073	CIVES ADDRESS ON SIT STORY TO SEE TO SEE THE CONTROL OF SIN EXTRE CONTROL TI-MIL ELECT 3674.9 3721 3	ラフ・ドースファーティスティートルイドルルドラインタスとしてアステステステステステス	54APR 214.17 504.70 201.20 515.50 359.5 5211.40 552.7 247.70 60.40 296.50 250.90 379.70 284.60 155.40	er clare	11 217.3	J. 211.	JS - 17.3	7.1.3
			25	1	3.16	. 41.0	よっしょ	a J.L.	3 JAC	35.70

APPENDIX F

HISTORICAL INFLATION INDICES :

11RFKA JE	IRFRAME PAULUCITON	E to Lan	Profile Properties	AUCHEGATE I	E AIM VEHICLE
I'tUL F	77.1014	1.1.1.3	7.40.10.4	INDEX	FACTOR
CY67=	E1 47.4	Cro/=	11001	CY07=	F Y 80=
160.0	1.000	1 f.	€nea•4	100.0	1.0000
	1	1 1 1 1	t 1		
47.3	5.534	33.5	4.7360	49.1	5.3824
52.1	5.5.75	t. 1. 3	こ 八 口 ま 。 ナ	54.5	4.6713
53.0	(cop. • +	.3.1	4.3100	6.55	4.7297
56.8	4.0142	3.00	2-5-31 m = +	58.9	+98+•+
62.+	01714	13.	3,11.4	か。すら	4.0734
64.7	4.6475	74.5	3.e. 57.	0.7.0	3,9457
51.5	5.3422	77.	3.5000	9.69	3.7875
4.60	3.77.0	79.5	5.4557	71.0	3.0689
73.1	5.5077	⊃•+®	3.2421	75.6	3.4971
17.6	3.5743	3006	3.019H	7.08	3.2861
27		· ·	1 445	F . C &	4.1957

**

AIMFRAME PRODUCTION COLOCOPRODUCTION
, , , , , , , , , , , , , , , , , , ,
21.12
: • · · · · · · · · · · · · · · · · · ·
3.17.0 2.0125
6.
a• ` :
W. C.
* * * * * * * * * * * * * * * * * * *
5.77
42.7
42.U
100.00
104.6
111.1
121.8
127.0
150.7
1,0,3
157.2
173,1
109.7
207.0
214.5
246.6

IR VEHICLE VIONICS	CTOR	40	8		16	83	\$9	4	5271	53	\$	Š	7	5260	2910	9	93	9	*	98	4239	116	5914	5928	000	1296	0440	2012	0 1 1 0	3064	200	2562	2465	2461	2420	2376	2.2503	9 1 9	****	000	1762	1556	1494	š	56	2	9	1312	7
AIR AVI		>	•		• •				6		•	•		•	•	٠	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•		•	•	~	N C	V		•			•	•	•	•		'n	•
AGGREGATE Including	NDEX	¥67=	0.00	1 0	N. 00	000	10	02.	02.	02.	05.	05.	05	200	9	9	*	0 0	90	90	07.	6	90	90	80	60	,	5	•		, , ,	2	15.	15,	15.	16.	16.	•		9 0	19	20.	0		ن	•	ò		٠,
	H	J	-	•		. ~	~	-	Ā	~	-	-	~ •		٠,				-	-	-		_	٠,	٦,	-	٠,	٠,	4 -	-	• -	• ~	-	7	7	~	⊶ •	٠,		• -	-	-	-	-	7	7	~	-	-
AIR VEHICLE AVIONICS	ACT	780=	000		635	9	.606	ž,	S.	ຜູ	ť	ស្ន	ຜູ	ب		י	ກຸ	ທຸ	*	7	₹.	₹:	₹.	3 :	•	•	•	•	•	7 "	, m	. ~	N	ď	ď	Ŋ.		•		• •	. ~		٦,	ઃ	٦.	٦.	∹	٦.	~
SATE																																																	
AGGREGATE Excluding	INDEX	CY67=	100.	1 0	•	000	101.4	0.2	102.9	102.7	102.8	102.9	102,1	102.8	1007	σ.		•	90	106.7	ů,	107.6	90	90	9	109.2	2 3	3;	71110	7 5	7 5	115.7	16	116.2	16	9	116.9	` :	7 :	7 611	19	2,	7	21	0	_	_	168.3	~
PRULICETTON	7	185	• 00	1 -	9	71	183	.179	1551	.144	.127	. 12	.140	.12	111.	.112	. 100	• 00.	.089	, 0 76	.071	.072	.047	• ·	400°	٠, د د د د	າ: ວ:	, ,		2 =	•		. 94	.36	٠٧٦	.96	95		7	97.	. 91	. 8	88	. 87ª	. 87b	.87	898.		٠. در
	_	12	~	, ^	u n	י נ	· O	~	8	~;	·N	2	N.	CV (N :	~	~	∾	7	V	CV ·	~	CV.	~ (N	N) (N C	N C	•	4 ^	, 0	. ~	-	7	-	-	٠,	٠.	٠,	- ۱		٠	-	1	7	7	7	-	-
531(01)	NULA	=1=	;	1 :	• •		່ວ	٠.	,		5.5	3.5			- ·		,	J. C.	ñ	7.0	ė.	٥	۲.		o 1	•	٦. و	Ω:	0 3	. 3	1 1	: 0	-	\Rightarrow	_	Ϊ.	٠ 🕚	o :	* :	• :	ć) s	٠	~	~	,	۲.	^	r.
4	ž	۲		1 -	7	10		1		10	2		0.1	2.	7	⊒ ;	= -	7		7	7		91) 	□ .) ;	7 .	2 .	7 .	2 -	7 -	?		11	11		7.			7 -				11	11	1.1	11	11	11
	LTCR	מכון	3	1 2 2 1 7	1777		er.7:	203.	6.547	6321	0214	245	6455	6172	2000	, 1/3	ゴルエ	9220	,ის3	. 753	54KB	1070	1111	3196	5115	45.50 45.50	00/4	100	C - C - C - C - C - C - C - C - C - C -	1007	1277	2012	2629	2625	2570	2574	2491	7147	2561	2207	144	20.55	1:07		2711	15to	1054	ひせん	+ 671
יישנושניישני	FAI	ێ	-	•		1 ^	•	7	•	•	•		•	•	•	•	`. ~	•	•	•	•	•	•		•	•	, ,	•	•	•	•		•	•	•	•	٠	•	•		•	•				•	٠		•
46 Esc. 2	۲.	= 1	7.10	· ·	, .	, g	· ~.	-)	2 **	٠.	•	ن •	2.0	T	s .	٠	·v	~•		ر. د.	-	- .	.v.	•	.	<u>.</u> د	ς, . • ο	ند	3 3) (n 4	• •	t t	4.	۲.	. n . 7	٦,	u,	ນຸດ	• 1	J				•	.,	n,	.	ń
10	1 t	CT 3 /	- 01		100	100	1,75	-		47	∢ :	155	1))	f □	† -, , ,	13.	135	007	102	1.05.	107	1 en 1	7 O :	=	⇒	•	110	011	7 .	7 -	7.4	113	120	120.4		170	1/1	77	4 .) : 		1 1	12	17.	143	145	Ð	Э	₹., ***
NOIJ		11	, i	1 :	† ř	, <u>,</u>	· *	•	1.5	'n	n .*	40	J.	10	0 T	7	ב נ	T) T	٥	71 17 7	43	8,10	0 + -	1 + 0	7.5	7 '	ر د خ	ر د ز	, ,	V 4	0 7 7	352	<u>ب</u>	ŧ.	ŋς	t)3	_	200	n :) <u>-</u>		₩/	7	2,5	5.43	23	.h • • • •	1
) \{\(\frac{1}{2}\)	FALI	_	1.02		•	• •	•	•		•	•	•	•	•	•	•			ŧ.	3.	7	3.	₹.	3,	٠, .	₹,	•	·) ·	•	3 -	. ~	1 1	``	٠.		`	`. :	١.		,	`	-	-	٦.	7	~.	~	~	-
H H H H H	_		(S						_	2	Š	_	.	_	-	_		_		_		_	_	.		••	_	n =				o - a		_		_		_		:	_		_			_	_		
1 1 4	MINE	167	00.		•			102.1		•	32.	62,		25	O	2	. 60	•	90	•	٥٠.		90	10 C	, c	٠ د د	-	•		-	•	114.		_	_										-	_	_	121.6	_
			¥ 4	:	0 1	2 2	Ę	r o	50	99	e O	o o	ş	2 9	TO :	•	50	69	69	D.	60	£.	69	ž (υ. (3	r :	2 6	2 2	2 6			7	7.0	7.0	2 ;	2 5	2 :	:	: :	1	7.1	7.1	7.1	7	1.1	7.1	17	7
			Ç												3	r; O	9	Ē	10 0	Ć	Ç	200	ĵ,	D (60								7.0	70	7.	0.2	2 5	2 5											
				1 -	1	. V	100	1	ر د د	JAP.	1) 1)	1	1	177	7	3	7	יני ני))	٠ ٢٠.) (7.5	ت ا ا	T :	X I	44	,	, i		7	2 7	, J	JAC	115	7	1 7	4	5		2 2	ver	?	170	4.60	+ 1:1:	T T	7.	٠, ١ ٤	ה

										2.0534								_	_	1.9240				1.8696																						1.4739						
٠.	•		•	: :	'n	•		ė,		127.8	9 0	•	29.	•	33.	å	ď	33		. K		36.		36	39.	÷.		1	4 5.	å,	5	i i	58.	60	61.	÷.	6.0	99	68.	69	.	: :	73.	74.	75.	176.2	7.	ج ا	, d	•	: :	
20.	201.	72.	127	116	125	.083	2.066	10.0	7.040	2.056			022	166	969	.981	. 971	.961	707	940	939	.913	.905	. 683	673	0 4	623	.803	٠79	.739	723	. 65A	649	621	609	970	570	.559	.547	460	ָ האניים היינים	508	501	.492	. 483	1.4735	***	# 12 # 12 # 14 # 14 # 14 # 14 # 14 # 14	. t	0 E 4 .	437	
25	77	, i	, . , .	5	24	26.	27.	59	5	•	. 00	, o	30.	32.	34.	53.	34.	36	• 4 • 4	36.	36.	38.	38.	9	• •	, v	1	9	47.	51.		ָ מים		62.	÷.	ເດີ		69	70.	72.	ë t	5.5	76.	77.	78.	179.3		81.	8	83.	163.4	i i
0	900	200			843	30	. a 30	9000	629	610	770	770	000	3665	787	.786	790	761	77.	755	750	717	.730	727	217	1.7041	697	900.	• 6 7 8	100	637	2 4 4	601	.59A	.572	10 U 27 M 10 U	1.5269	522	.513	2.5	7	200	469	.491	4 90	*	T .	044.	2 0 2 0 2 t	453	449	
Ē		9			18.	19.		7	•		• -	٠,٦	• •		23.	25	N.	\$2	•	7.4.1	25.	٠,	Ż.	27.	د7.		1 7	30.	31.	35	÷ .	, v		57.	.66	• • •	2.644		45.	'n.) t		147.5		~		D 0	• 1	147.	٠, ٥	-	,
~	÷	∹.	• ~	• =	•	٠.	0.	਼	ຸ	2,1259	-	: :	•		5	=		400	200	7.0140	9.6	935	45.19	クエン・	# T.	() T	426	26.2	. 133	.767	757	7 7	700	619	30.13	ນ 20 ປ	1.5472	541	. 558	. 526	400°	5.00	520	1.11	,52U	1.4999	7 .	0 4 7 0	0.00	, ,	1.5	
1.001	A. 6. 1	1 Z B • C		150.4	150.1	1,0	21	31.	27	140.1		. 1		÷,		130.5	3		•	155.2				•	•	ν	•		÷		ۍ د	• (? ~	. 74	2.	::		7:0	77.	ا را د د				7.3.					• •			
•	•	•	•				•	•	•	•	•	•				•	•	•	•	•		•	•	•	•	•			•	-	•	•		•	•	-	1.5778		-	•	•			•	•	1.040.0 1.040.0	•	•			•	
د د د			• ^	 	22	3.	¿6.	68.	97	28.		, c k	310	33.	34.	34.	34.	35.		36	36.	38.	39.	4,		140.0 144.	1	47.	48	51.	152.3	157.4	38	61.	8	9	166.0	. 19	66	.0.		į	175.1	76.	77.	176.7	, 6	֓֞֞֜֜֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֓֓֓֡֓֓֡	4	20	185.0	
																													*	*	.	3.5											16	70	ر د د	2 2	5 7	0 5	ج ج	70	7.	
1	7	7 ;	: :	: :	72	22	7.2	2 2	7 :	2 ?	y .	7.0	22	75	12	73	25	2,5	, L	2.2	7.3	73	73	23	C .	2 2	7.	+.	7.	. :	: :	. 3		Ž,	*	r (2.5	75	5.	C #	3 5	15	15	£.	۲;	۲ ۲	: 4	2 2	. 9	76	76	
1	٠ ا	7 .	ב ב ב	2 G	147	.	 L.	¥ ;	E .	֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓		2 a	רי ב רי ב	3	UEC	100	17	1 T	: > 1 •	200	1	A 16	ar b	100	2 :		47. L	į	4 7	<u>~</u> :	2 -	9:10	S.P.	100	> C) Z	FEB	AAK	AP.	4	5 5	AUG	3 2.P	۲3 د	> \ - -	ر د د	1 1	7 P.	Apk	1	300	

F 5

																								. :	÷	٠			:		†	•																	
₹.	*	. 4041	٠	.386	.377	.368	.363	. 353	. 343	.331	•	.313	.306	.299	.297	.287	.279	.272	. 259	.257	. 250	.246	.239	. 226	.212	.206	. 191	181	.160	.158	.156	.151	***	.124	911	701.	980	.064	.041	028	.024	.006	.001	. 993	.986	0.9786	.968	960	.956
83.	163.7	es.	96.	87.	88.	89.	90.	92.	93.	95.	96.	97.	96	.66	9	01.	03.	04.	96.	9	07.	99	9	:	14.	15.	18.	19.	25.	24.	24.	25.	26.	31.	232.6	9	0 0	 	64	52.	53.	58.	59.	61.	63.	55.	9	4.04	7.
. 41	-	. t	387	583	m	567	~?	351	. 541	328	. 322	.311	05	.298	.299	. 289	.201	1.2762	. 262	.260	. 252	246	.241	. 229	214	.208	95	.182	170	.159	157	.152	.145	124	1.1171	707	070	190	1.0395	028	25	900	100	993	.986	. 479	£	40	0.9578
186.5	167.1	188.5	•	•	_							_	_	_	_	-	-	_	_			_	_		_		_		_	-	_	•			-	•	_		_			-		-		263.8	_	275.0	ď,
3	1.4353	SNT.	.417	.415	. 387	.37∪	.375	.372	.366	.356	.341	.334	.327	.309	.275	. Z t. a	.252	.233	. 223	.224	. 223	.220	.210	.196	.194	.179	.170	۰17،	.150	.147	.141	.138	.156	.129	114	.105	240.	20	, Je.	.634	. U<1	.010	.000	086.	.963	0.7704	101.	7.	0.7471
154.6		4 4 5 4 4	_	•	150.5	t.	•	9	•	102.1	105.	104.7	leb.	101.	•	175.3	75.	178.2	2	÷	73.	60.	ġì.	83		\$ 0.	•	•	1,1,1	•	192.1	•	•	9	197.	6.44.6	> =	205.1	70	Δ	.0	~	215	-	266.5	15.61.6	1.5.2.2	\$. 6.27	636.1
7	<u>:</u> †	3	1.5.72	Ξ,	•	. 37	3.	, 54	1.3437	1,5199	1,3965	1.2301	1.2950	1.092	1.5306	1.2765	1.2651	1.4726	1.2024	1.2716	1.2723	1.2654	1.2516	1.2580	1.2286	1.2208	1.2196	1,2197	1,1943	1.1324	1,1457	1.1700	1.1652	1,1291	1.1113	1.0923	0.000	1,01,41	1.4366	,	٥.	3,	$\overline{}$	٦.		36.24.00	•	•	U. +1 Ct.
:		•	1.44.7	1,45.5	•	190.0	194.6	6.02.07	٠,	215.4	-	_	211.3	_	A .	•	0	213.0	. ^	•		'n		~	_:	٠.	÷		•	•	•	•		_:	245,1	•	• -	•	•		•	2115	•	1001	.74.5	4.07.2	277.1	F. 6 7	J•
-	1	Ţ	4	•	. 7.	. 303	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•		•	Sec. 1 1.	•	٠.	, c. • ;
1.00.1	105.	•	144.	•	190.5	•	•			196.7				•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•								•			(. · po.)			•
																																														~		י	5
																																														Ť			Ē
1	4	7		<u>></u>	ر. د د	₹ 1	1	***	7	1	٠, در ل	ر بر	200	ر: ح	001	777	JEG	3	5.1 4.	ž K	1	≻ ₹	3	7	7	ンた	100	> .	JEC	ことつ	112	NA K	7	7 1	٦ -	1		0	7	177	;	:, _	* * *	ì	44	- -	<u>ب</u> ج	· · ·	, ,

																													A	Ŀ																			
AIR VEHICLE	AVIONICS	ACT	_	• 1		•	•	•				•	•	•	• (٠	•	• •	0268	•	•	•	. 4500 Bush		•	•	1.5687		•	•	•				•	•	•	1.2451	•	•	1.1286	•	1.0952	.011	.986	.961
AGGREGATE	Š	NCE	CY67=	• I	00	05.	102.8	3 8	90	980	.60	10.	13	115.7	9	20.	20.	21.	55	53	ກໍ່ຊ	, K	31.	32.	34	90	Ŕ	6	26.	9	69	72.	5	2	5	97.	90.	•		5.	90	13.	50	230.2		237.2	56	63.	70.
AIR VEHICLE		FALTOR		: :	ு	'n.	n.		, 3		3	~?	41	٧.			7	7	7	٦,	•			ς,	•	•	. ~	٦.		1.5671			ਤ :	•		."	F7 (~ -			ď	d.	Ξ.	1.1266	, (1.0956	011	.986	.964
AGUKEGATE	EXCLUDING	ille	CY07=			•	~ :	106.	ı v			10.		9.	9 4	000			•	25.	•		32	4.	Š	•	5	50.	58	164.1	72.	7	78.	81.	87.	51.	94.	80.0		.80	11.	17.	53	234.1	•	241.2	2	267.8	7
INDICES	PRODUCT 10N	FACTOR	Flace	. !	٦.	٦.	7.	•	•				•	7. 0	•				•		•			•	•	•			,,	• •	• •	. J.	Ŧ.	. .		· •	•	•	• (٦.	Ξ.	1,1473	,	1.0909	010	. AH >	ź
- 1	441-165	Ladex	CYe/z	• 1		101.3	165.0	•	0.00		107	1.40.1	10%./	, , , , , , , , , , , , , , , , , , , ,	1 1 5 7 1		17	17	•	17.	129.4	, 	22	23	24.	165.9	1 .W		M) .	169.4	, c	+7	+	3 0 :	155.7	5	2	N	•	יס	180.5	40	3	195.1	•	201.5		225.7	=
1	ocuentae"	~	11 7	• •	~	0	•		• 1	•	2.434	•	•	.5	: ^		. 7	7	٦.	~ ·	2.0411	•	2,0921	•	2.0316	1.9347	• •	. `	9	1.6032	• •		•	.	1,01,1	, FO	φ. (H)	47 C	1 .	. ~	۲,	. Y		1.1347	•	1.0058	, , ,	943	,
	Stoken res	1 . 35. 4	J	ا د	:	.) N	105.7) i	9	;	Ţ.	1.40.0	C	8. C. J.	7.7	3 6		ç,	20.7	7	3.3) , (3	7	÷,	150.0	,	7,	± '	5 4	17	2	3	ر ا	ת מנו	ţ	5	ا د د	. ~	.7	CŢ	7,	Ú.	240.0		251.3	, ,	7 + •	,
	1011100 v	٠.	_	•		٠.		. ·				7		4 (A. c.	٠,		~	٦.	٦,	•			71	r:	.		۲.	r	37	1 4,		3	. :	• •	. "	η,	47. 4	•	, ,	٠,		፣ •	1.1270		1.0491	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	93.	
•	AINFORM P	j	CY67=	. 1			95	200		. z		0.1	15.	5.	, ר	. 6	19.	20.	21.	2		8	53.	34.	36.	, c	ιŝ	00.	56.	166.3	70.	7.	77.			.60	25		200	ù7.	10.	15		232.4	:	238.5	57.	65	73.
			,	: :	· ~	57	50	: ر ر	0 7	, 7) To	÷	6.9	2 2	2.5	2.2	7.1	ני	17	۲;	22	· 2	15	7.5	73		± .	2	3 ;	: 2	12	75	£ 2	o .1	2.2	7,8	7:		7.7	7.6	92	92 9	0 1	6.	į	£ 5	90	90	00
			3	, ,	้ำ	•	 -	7) 4	7 +		· 7	2	,	٠. ٠		٠,	-	~	~ ;	+ -	→ ~	۱ ٦	,	٦.	v 1	n +		٠,	.	۰ -	V	7	.	٠,	ر ،	÷	٦.	ر. د د	‡	٦,	۱ ۱	~ ,	٠ -	• ~		n 3	٠,-	~	•

(

(

TE AIR VEHICLE NG AVIONICS	FACTOR	FY80=	1.0000		2.5487	2.4271	2.2778	2.1618	2.0790	1.9717	1.8264	1.5902	1.4727	1.4122	1.3456	1,2522	1.1590	1,0000
AGGREGATE INCLUDING	INDEX	CY67=	100.0	1	101.9	107.0	114.0	120.2	124.9	131.8	142.2	163.4	176.4	164.0	193.0	207.4	228.1	259.8
AIR VEHICLE AVIONICS	FACTUR	FY80=	1.0000		2.5924	5.4604	2,5089	2.1310	2,1031	1.9904	1.8346	1.5936	1.4724	1.4101	1.5440	1.2548	1.1398	1.0000
AGGREGATE EXCLUDING	INDEX	CY67=	100.0		101.9	107.1	114.4	120.6	125.6	132.7	143.7	165.8	179.4	187.4	196.6	210.6	231.8	264.2
PRJOUCTION	FACTOR	F Y 80 =	1.0000		2.1355	2.0793	1.7032	1,0891	1.8448	1.7900	1,7039	1.5549	1.4703	1.4551	1,5037	1,2251	1.1308	1,0000
AVIUITES	Lillian	C167=	100.	1 1 1 1	102.	100.0	110.0	116.4	116.	122.3	129.0	141.4	148.3	155.2	lblod	179.7	134.4	219.3
p40.1JCT Löp	FACTOR	FY80=	1.0000		2.0573	2.5+25	2.3226	2.1070	2.0945	2.0774	1.9147	1.5822	1.4738	1.4190	1,3411	1,2592	1.1514	1,0000
G11.1 at. P	Lijex	CY 127=	1100	!	102.5	107.1	117.5	124.5	150.0	151.1	142.3	172.1	104.3	1 1 2 . 0	205.1	215.3	1,50.6	3.77
INFRAME PRODUCTION	FACTOR	FY-U=	1.0300		2.4734	7+++2	6.43848	2.1920	2.1057	1.4654	1.5171	1.5970	1.4002	1.4475	1.3443	1,2535	1.1354	1.0000
AIRFAME	ז יוחזי ז	CY67=	100.0	11111	101.7	107.1	115.6	119.5	124.4	135.2	1+4.1	104.0	178.5	186.1	1.461	208.9	250.5	261.9
			1	;	to ch	6.3	7.0	7.1	12	2.2	<i>t</i>	75	70		1.1	73	7.7	G D

4

)

)

APPENDIX G

ANNUAL DATA FOR THE HISTORICAL INFLATION PROGRAM - - RAW MATERIAL PORTION ONLY

œ

Ø _ z

ALE

ပ

__ ⋖ \Rightarrow Z

Z ⋖

۲٦

~

PATA	9			0 0		•	•		•	•	•	•				•	•		•
RATE D	3	00	0.0	0 0	0	0.0	0 0	90	0.0	0.0	0.0	•	9 0	0.0	0.0	0.0	0.0	0	•
LABOR	<u>u</u>	000				•	•			•	•	•		•	•	•	•	•	•
.		00		0 0		•				•	•	•			•	•	•	•	•
		99.90	98.20	96.20	95.70	15.10	95.10	00.00	99.20	100.10	101.00	102.40	104.40	111.40	115.50	115.80	•	26.90	55.80
		 	3	0 0	0.0	30						9	7 7	20	90	90		~	40 1
					•		•	100.00			•		109				170	173	0 211,
		70.50	87.20	91.40	91.60	90.60	90.00	100.00	105.20	112.20	132,10	159.70	148.20	173,50	ð	1.5	9.1	3.	518.40
>		74.10	91.70	75.00	73.40	78.50	86.10	00.001	20	.20	9	116.50	141.70	_	149.90	_	9	71.00	216,50
N O S		137.60 196.30		111.50		•		00.001	3	112.03	0.0) *	125.10	150.90	•	•	11.50	31.10	255,10
î A L		107.00		1111.00	102.90	101.40	04°46	100.00	95.30	31.00	35.+4	•	90°00 95°00	120.00	145.40	153.30	163.50	174,20	191.60
ATER		107.60 106.60	110.50	111.30	102.90	101.40	34.66	20.00.	162,40	103.70	110.60	106.70	105.20	3	'n	ن. <mark>* د</mark> ز) · B C	ر د •	245.20
Σ		100.00	00.0	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.001	142.70	100.00	~	228.10	243.00	0.0	275.10	76.467
		0	÷ ; ; ;	7 / • oJ	7.00	17.00	114.30	137.701	94.60	105,50	112.10	00°66	117.00	159.10	154.00	163.: 0	219,30	ċ	575.50
		73.00 00.00	, C,	7),	77.	8.	16.0.00	162.	163.	11/	: ::	156.	161.	191,90	215.	235	204	297.
		93.50 98.40	20.00	97.10 27.72	07.46	97.10	96.10	100,000	105.70	113.40	119.50	125.30	152.23	105.90	176.00	215.30	234.40	257,30	291.99
	, , , ,	125.70	20.20	18.60	67.00	04.47	91.40	91.60	03,10	12,50	50.90	35.00	22,13	57,10	65.30	DO.84	97.10	.97,80	18.40
7 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	91.0	33.10	14.70	34.70	16.50	34.00	96.00	100.00	104.70	109.50	110.40	123.40	135.60	167.60	164.30	502.00	250.00	255.90	242.40
	105.8	102.30	105.16	44.20	1000	75.50	90.00	100.00	103.40	105,401	100,30	169,10	109.30	136,20	150,20	159.20	107.60	J. */ T	124.03

MATERIAL COST DATA

3

3

(3)

 Ξ

(3)

6

⊛

8

(9)

3

 $\widehat{\Xi}$

 $\widehat{\mathfrak{S}}$

9

APPENDIX H

MONTHLY DATA FOR THE HISTORICAL INFLATION PROGRAM - - RAW MATERIAL PORTION ONLY

DATA FOR

_	;													_		_		_	_	_	_	_	_	_				_	_	_																		
. 9 F	<u> </u>																																															72
18 0THE 3723											•			•				•	•	•		ö	•			•				•	٠	•	•					•	•	•	•	•	•	•	•	•	•	
17 ENG 3722									•		•					•	•		•	•			٠	•	•	•	•		•	•	•	•	•	• •		•	•	•	•	•	•	•	•	•	•	•	•	000
16 ACFT 3721									•		•					•	•		•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	000
LALUK- 15 ELECT 5574:3									• -		• 7							•	•		•		٠	•	•	٠				•	•	•	•			•			•		•			•	•	٠	•	0.0
14 1178XX ELECT		, _U		t o	7.	9.5	6.7			E .			9.0	0.6	9.0	9.0	9,1	9.1	98.9	00.2	* 00 *	9.00	00.0	900	00.5	9.00		01.7	01.4	01.4	200	200	0 3 0 3 0 3	01.2	1.2	01.0	01.5	01.5	01.9	01.9	0.8° B	63.5	03.7	3.1	2.7	J.,	•	00.00
13 505XX 1-M1C	3 7 8 0	0.00	0.00	0	0.00	3.00	0.00	0.00		0.66		5.6	9.2	4.2	9.	9.2	9.2	9.5	9.20	07.6	02.6	9.20	9.50	9.20	9.20	7.7	900	5,50	5.50	5,50	5.50	200	, ,	2.00	5.50	5.50	06.6	5.50	5.50	5.50	00.00	00.00	1.70	0.5.7	05.7	\ · ·	` · ·	05.70
12 250463 2 MOMEL 1	0	00	90	05.20	05.50	03.20	03.20	05.40	25.40	04,40	13.4	95.4	05.4	05.4	9.00	05.4	05.4	0	10.5	19,5	10.5	10.5	10.5	10.5	10.5		10.5	10.5	36.9	5u.9	30.9	200	200	30.9	30.9	30.9	33,1	55,1	56.0	30.0	. 0.0	3e,00	04.04	01	0	÷.	3 :	
11 025/2 276KS			3) o c	5.10	7.50	5.10				7.40	2.70	9.30	06.0	9.50	9.10	01.00	05.60	09.30	02.60	10.40	13,00	16.10	16.50	13.40	77.67	27.5	27.80	31.30	35.70	55.00	35.00	35.70	56.70	35.20	52,40	24.60	23.30	23.10	0 × • a	0.700	5.20	00.2	J.	J	٠ ·	•	20.68 1
20 2013 / 1 XTRO C	0.7		00.00	00.10	00.10 1	00,10	00,10	7 01 00	01.10	100		01.50	04.50	04.50	04.50	04.50	50	000	950	€.	19,40 1	7.0	00	000	20	3 6	14.10.1	2	640	90.	٠ پ	17.50 1	2 7	2	2.	?	7	21,00 1	0.5	21.30 I	1 06.15	21.50 1	41.59 1	<1.0°.15	21.51 J		7 nc*7	7. 7. 7. 7.
250115 c	1 - 5	-			7			-		-		9	1.6	7.6	8	6.2	ó.2	2.0	6.6	٥, ٥	ٽ. ٽ	٠. ه	ر د	ۍ د	υ. Σ	? :	, ,	3.	, t	5.4	٠ د ده	* *		•	3	5.5	3.5	3.5	5.5	5.5	٠.	*. ~	•	÷.	٠, 4	ى. ئ	1 :	
Lui	: :		· -	· -•	· -	-				-	•	~	•	٠	÷	,	4	ţ	÷	•	<u>ن</u> ن	70,		10	·.	•		1.0	=) n	· :	• = =	• =		· -:	-	=	=	=	•	=			•	٠,	٠.	•	101. 101. 101.
4 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2	1 1 1	•	100.00						•								•	•		•	•	•	•	•	•	•	100.00	ם.	•	•	•	•		• •		•			•				1.15.00		•	14.00	11.000 T	10.001
1147	· · · · · ·	•		٠.	: • 2	:						1 7	6.3		5.6	۷.۶	Ş.	₽. •	5.5	a.0	000	03.5	0.5.5	07.1	10.7	٠ د د د	110.70	10°7		17.,	۲۰,	٠ ٠ ٠ ١ ٠ ٠	• ~			7.1		t	÷.		t.	†		-	†	† •	[:\.]	101.00
			101	37.67	1.1.0	1,1,50	101.140		171	1-11-1	1000	1 3 4 4 6	1 11.40	101.40	101.00	101.70	104.50	133.00	5.0	192.201	96	100.00	200		• • • •	• 0 :	135.10	0.1	13.	÷ 1	+	:				•	:	•	•	•	11.0° 48		<u>``</u>) . • . • . • . • . • . • . • . • . • .	77			70°;
1			1	0.1	1.0.1	100	-	-		7	,	105	100	100.	138.	lue.	105.	100.	109.	109.	110.	110.	113.	2.1.5	115	671	• ~	116.	116.	117.	117.	117	117	` -	1.20	6/1	150	121.	121.		27.7	166	122.			: :		
100 100 100 100 100 100 100 100 100 100			1 7	101	113.27	103.01	105.5		103.7	165.0		135.70	103.00	104.17	105.50	103.50	132,20	142.20	105.40	135.40	105.40	166.2u	100,40	110.00	110.60	110.00	146.00	125.00	165.50	150.73	150.	1 40 70	150.40	15.1.30	139.30	150.30	150.00	130.48	150.03	15.1	13.1.7.1	150.	ः ११ ११	-	150.33			13% 10
130.7. CB 7.1	-	2	001	20.	100	110	195	10.5	103	103	1.03	103	103	103	107	70.	107.	107.	107.	107	107	107	107	707	107		112	112.	112.	107	· 1	4 1	115	119	119.	113	119.	119.	115.	11,		119	119		. :		· ~	127.40
2 C C C C C C C C C C C C C C C C C C C	· ·		0.74	-	1	2.4	. 0	1.5	107		1.02	1.00	103	104	104	104	104	104	103	, 03	707	101	101	* 0	200	2 6	100	107	101	707	7 0 1	7 7	107	107	103	70.7	109	601	104	÷	11:0	<u>.</u>	<u>.</u>		τ . -	: :		
0,730		? <	1	10070	•	•	*		1	•	D 3M A Y	10000	6"JUL	90400	63560	é suc T	4 3130V	عيالاه	マ・イント・ロ	0 11 613	HVH+ 9	STAPE O	PAMPO		ייין טייין טייין טייין טייין טיייין טייי	30 H C 5	10060	DAME	31769	1 40s7	7.74.7	7.146.	7 .3 M. 7	1,17.1	7000L	1.16.1.3	1350	7,1,6	207	<u>.</u>	1,101,		1 4 7					71517

~ 72 0 Ø S × ⋖ ۷ I لت \vdash 7 ◂ $\mathbf{\Sigma}$ $\overline{}$ Σ.

18 OTHER 3723.9 F

3722

ACF T 3721

21,1463

10100

130252

700

MUSSEL

16

Column C	197.00 102.00 214.00 193.40 155.7 197.00 102.00 214.00 193.40 155.7 197.00 102.00 214.00 193.40 155.7 197.00 102.00 214.00 219.30 155.7 197.00 102.00 214.00 219.30 155.7 197.00 102.00 214.00 219.30 155.7 209.10 162.00 214.00 219.20 155.7 209.10 162.00 214.00 219.20 209.10 170.30 219.40 220.00 170.30 209.10 170.30 219.40 220.00 170.30 209.10 170.30 219.40 220.00 170.30 209.10 170.30 219.40 220.00 170.30 222.00 170.30 219.40 220.00 170.30 222.00 170.30 219.40 220.00 170.30 222.00 170.30 219.40 220.00 170.30 222.00 170.30 219.40 220.20 170.30 222.00 170.30 219.40 220.30 170.30 222.00 170.30 222.00 209.40 233.40 221.40 220.40 22	420185 ALUAN 242.00 125.5 242.00 125.5 242.00 125.5 0 255.90 175.3 0 255.90 176.3 0 275.40 204.6 0 275.40 204.6 0 275.40 204.6 0 275.40 211.6 0 275.40 211.6	### ### ##############################	- 175kKS MCME - 149.20 241. - 150.10 241. - 150.10 241. - 166.70 241. - 172.40 241. - 171.40 241. - 171.40 241. - 171.40 241. - 172.40 241. - 159.00 241. - 175.30 262. - 176.30 262. - 176.30 262. - 176.30 262. - 176.30 262. - 176.30 262. - 176.30 262.	11. MIL 0 171. 80 0 170. 00 0 169. 80 0 169. 80 0 169. 80 0 169. 80 0 169. 80	1			2
197 101 157-10 151-10 1	197.00 162.50 214.60 193.40 155.7 197.00 162.50 214.60 219.30 155.7 197.00 162.50 214.60 219.30 155.7 197.00 162.50 214.60 219.20 152.5 209.10 162.50 214.60 219.20 162.5 209.10 172.40 214.60 219.20 164.5 209.10 172.40 214.60 220.50 175.80 209.10 175.30 219.40 220.50 175.80 209.10 175.30 219.40 220.50 175.80 222.50 105.50 218.40 220.50 163.9 222.50 105.50 218.40 221.60 221.4 222.50 105.50 218.40 221.60 221.4 222.50 105.50 233.40 221.40 221.4 222.50 105.50 233.40 221.40 221.4 222.50 105.50 233.40 221.40 221.4 222.50 105.50 233.40 221.40 221.4 227.40 205.50 233.40 221.40 221.4 227.40 205.50 233.40 221.40 221.4 227.40 205.50 233.40 221.40 221.4 227.40 205.50 233.40 221.40 221.4 227.40 205.50 233.40 221.40 221.4 227.40 207.20 233.40 221.40 221.4 227.40 207.20 233.40 221.40 221.4 227.40 207.20 233.40 221.40 221.4 227.40 207.20 241.20 242.40 221.4 227.40 194.00 241.20 245.40 225.7 226.50 192.20 221.30 225.70 225.7 226.50 192.20 220.00 225.30 221.4 227.40 204.50 220.00 225.30 221.4 227.40 204.50 220.00 225.30 221.4 227.40 204.20 20.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 20.20 227.40 204.20 20.20 20.20 227.40 204.20 20.20 20.20 227.40 204.20 20.20 20.20 227.40 204.20 20.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 20.20 227.40 204.20 227	244.00 127.50 244.00 24	444447. Ku 1699. Ku 1699. Ku 1699. Ku 1699. Ku 1699. Ku 175. Ku 1699. Ku 175. Ku 1699. Ku 175. Ku 1699. Ku 175. Ku 1997.	149 152.10 241 152.10 241 152.10 241 166.70 241 166.70 241 172.40 241 172.40 241 175.30 262 175.30 262	0 171.80 0 169.80 0 169.80 0 169.80				
197.00 lb. 10. 5 of 21. 5 of 2	197.00 162.60 214.60 210.30 105.7 197.00 162.60 214.60 210.30 105.7 209.10 162.60 214.60 210.30 102.5 209.10 162.60 214.60 210.20 102.5 209.10 162.60 214.60 210.20 176.6 209.10 175.30 219.40 220.60 176.6 209.10 175.30 219.40 220.60 176.6 222.60 105.60 213.40 221.80 1053.9 222.60 106.60 233.40 221.40 221.4 222.60 106.60 233.40 231.80 221.4 222.60 106.60 233.40 231.80 221.4 222.60 106.60 233.40 231.80 221.4 222.60 106.60 233.40 231.80 221.4 222.60 106.60 233.40 231.80 221.4 222.60 106.60 233.40 231.80 221.4 223.40 202.70 233.40 231.80 221.4 237.40 202.70 233.40 231.80 221.4 237.40 202.70 233.40 231.80 221.4 237.40 202.70 241.20 245.90 221.4 237.40 202.70 241.20 245.90 221.4 237.40 202.70 241.20 245.90 221.4 237.40 202.70 241.30 245.90 221.4 224.10 194.20 241.30 245.30 232.7 256.30 194.20 241.30 245.30 233.4 257.50 203.30 241.30 245.70 225.7 258.30 203.30 241.30 245.90 221.4 257.30 203.30 241.30 245.70 225.7 257.30 203.30 241.30 245.70 225.7 257.30 203.30 241.30 245.70 225.7 257.30 203.30 241.30 245.70 225.7 257.30 203.30 241.30 242.70 225.7 257.30 203.30 242.80 242.90 242.7 275.70 203.30 243.30 243.30 243.30 275.70 203.30 243.30 243.30 243.30 275.70 203.30 243.30 243.30 243.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.20 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 275.70 203.30 203.30 275.70 203.30 203.30 275.7	242.00 125.50 242.00 125.50 242.00 125.50 242.00 125.50 242.00 125.50 242.00 125.50 242.00 125.50 242.00 175.50 255.90 175.50 255.90 176.50 255.90 176.50 255.90 176.50 255.90 176.50 255.90 176.50 255.90 176.50 255.90 176.50 255.90 176.50 275.40 2011.6 275.40 2011.6 275.40 211.6 211.6 222.50 20 2	######################################	150.10 241. 152.10 241. 165.20 241. 166.70 241. 166.70 241. 172.40 241. 174.40 241. 174.40 241. 174.40 241. 175.40 261. 175.30 262. 175.30 262. 175.30 262. 175.30 262. 175.30 262.	0 171.80 0 171.80				
197:00 10.5. 10.5	197.00 162.60 214.60 213.50 155.7 197.00 162.60 214.60 213.50 150.5 209.10 162.60 214.60 213.50 150.2 209.10 162.60 214.60 213.50 150.2 209.10 175.50 214.60 220.60 176.6 209.10 175.50 214.60 220.60 176.6 209.10 175.50 214.60 220.60 176.6 222.60 105.60 223.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 222.60 106.60 233.40 221.80 221.4 227.40 202.70 233.40 240.10 221.4 237.40 202.70 241.20 244.20 221.4 237.40 202.70 241.20 244.20 221.4 237.40 202.70 241.20 242.20 221.4 237.40 202.70 241.20 242.20 221.4 237.40 202.70 241.20 242.20 221.4 223.60 194.00 241.20 242.20 221.4 225.60 194.00 241.30 223.70 223.7 226.30 203.80 241.30 223.70 223.7 226.30 203.80 241.30 223.70 223.7 226.30 203.80 241.30 223.70 223.7 227.40 203.80 241.30 223.70 223.7 227.40 203.80 243.80 243.80 223.7 227.40 203.80 243.80 243.80 223.7 227.40 203.80 243.80 243.80 243.40 227.70 203.80 243.80 243.70 223.7 227.70 203.80 243.80 243.80 243.7 275.70 213.80 243.10 243.80 243.7 275.70 213.80 243.10 243.80 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.10 243.80 275.70 213.80 243.80 275.70	242.00 123.00 224.00 223.00 22	447.70 169. 447.70 169. 46. 175. 46. 175. 56. 180. 56. 180. 56. 180. 56. 180. 56. 180. 56. 180. 57. 180.	152.10 241. 163.20 241. 165.20 241. 166.30 241. 171.40 241. 171.40 241. 172.40 241. 172.40 262. 173.10 262. 173.10 262. 173.10 262. 173.10 262. 173.10 262. 173.10 262.	0 171.80 0 169.80 0 169.80 0 169.80	22111111111111111111111111111111111111			000000000000000000000000000000000000000
197.100 167.01 21.	197.00 162.60 214.00 219.20 120.00 197.00 162.60 214.00 219.20 120.00 209.10 162.60 214.00 220.00 170.00 209.10 175.50 214.00 220.00 170.00 209.10 175.50 218.40 220.00 125.90 209.10 175.50 218.40 220.00 125.90 220.60 175.50 218.40 220.00 125.90 222.60 180.60 230.40 231.00 221.40 222.60 180.60 230.40 231.00 221.40 222.60 180.60 235.70 231.00 221.40 237.40 202.70 235.70 231.00 221.40 237.40 202.70 235.70 231.00 221.40 237.40 202.70 241.20 242.90 221.40 237.40 202.70 241.20 242.90 221.40 237.40 202.70 241.20 242.10 221.40 237.40 202.70 241.20 245.90 221.40 237.40 202.70 241.20 245.90 232.40 237.40 202.70 241.20 245.90 221.40 237.40 202.70 241.20 245.90 221.40 237.40 202.70 241.20 245.90 232.40 237.40 202.70 241.20 245.90 232.40 250.40 194.00 241.90 245.90 245.70 250.40 194.00 241.90 245.90 235.70 254.50 194.00 241.90 253.70 253.70 254.50 194.00 241.90 253.70 253.70 254.50 194.00 241.90 253.70 253.70 255.70 203.80 241.90 253.90 221.40 255.70 203.80 203.80 203.80 211.40 275.70 203.80 203.80 203.90 221.40 275.70 203.80 203.80 203.90 221.40 275.70 203.80 203.80 203.90 243.80 275.70 203.80 203.80 203.90 241.80 275.70 203.80 203.80 203.90 241.80 275.70 203.80 203.80 203.90 241.80 275.70 203.80 203.80 203.80 214.80 275.70 203.80 203.70 203.70 203.70 275.70 203.80 203.70 203.70 275.70 203.80 203.70 203.70 275.70 203.80 203.70 203.70 275.70 203.80 275.70 203.80 275.70 203.80 275.70 203.80 275.70 203.80 27	2 242.00 123.00 255.00 255.00 123.00 255.90 173.00 255.90 173.00 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 1740.3 0 255.90 20 275.90 211.0 20 255.90 223.5 0 223.	644.60 1459.00	166.20 241. 166.70 241. 166.70 241. 1168.80 241. 1172.40 241. 1172.40 241. 1172.40 262. 1172.90 262. 1172.90 262. 1172.90 262. 1172.90 262. 1172.90 262. 1172.90 262.	0 171.80 0 169.80 0 169.80 0 168.70 0 168.70	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
197:101 10:10:10 10:10 10:10 10:10 10:10 10:10 10:10 10:10 10:10 10:10 10:10 10:10 1	197.00 162.60 214.80 219.20 102.5 209.10 175.60 214.90 220.60 176.8 209.10 175.50 214.90 220.60 176.8 209.10 175.50 214.90 220.60 176.8 209.10 175.50 214.90 220.60 176.8 209.10 176.50 214.90 220.60 176.8 209.10 176.50 214.90 220.90 1053.9 222.60 106.60 220.90 231.80 2013.9 222.60 106.60 230.90 231.80 2013.9 222.60 106.60 230.90 231.80 2013.9 222.60 106.60 230.90 231.80 2013.9 222.60 106.60 230.90 231.80 2013.9 222.60 106.60 230.90 231.80 2013.9 222.60 106.60 230.90 231.80 221.9 237.90 202.70 233.90 231.90 221.9 237.90 202.70 241.80 244.90 221.9 237.90 202.70 241.80 244.90 221.9 237.90 202.70 241.80 245.90 221.9 237.90 203.70 241.80 245.90 221.9 237.90 203.70 241.80 245.90 221.9 237.90 203.70 241.80 245.90 221.9 256.80 192.90 241.80 242.90 235.70 235.70 256.80 192.90 241.80 245.90 225.70 256.80 192.90 241.80 245.90 225.70 256.80 192.90 241.80 245.90 225.70 257.90 203.30 263.90 263.70 235.70 257.70 203.30 263.90 263.90 221.9 275.70 203.30 263.90 263.90 263.70 275.70 203.30 263.90 263.70 263.70 275.70 203.30 263.90 263.70 263.70 275.70 203.30 263.90 263.70 263.70 275.70 203.30 263.90 263.70 263.70 275.70 203.30 263.90 263.70 263.70 275.70 203.30 263.90 263.70 263.70 275.70 203.30 203.30 263.70 263.70 275.70 203.30 203.30 263.70 263.70 275.70 203.30 203.30 203.70 203.70 275.70 203.30 203.30 203.70 203.70 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 203.30 275.70 203.30 203.30 275.70 203.30 203.30 275.70 203.30 203.30 275.70 203.30 203.30 275.70 203.30 203.30 275.70 203.30 275.70 203.30 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 275.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203.30 277.70 203	242.60 10.175.50 0 255.90 177.50 0 255.90 177.50 0 255.90 177.50 0 255.90 177.50 0 255.90 170.30 0 255.90 170.30 0 255.90 170.30 0 255.90 170.30 0 257.90 170.30 0 257.90 170.30 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 2017.60 0 275.40 225.50 0 225.50	564.60 175. 564.60 1866. 569.60 197. 569.60 197. 569.60 197. 569.60 197. 569.60 197. 57.60 208. 57.60 208. 57.60 208. 57.60 220. 57.60 220. 57.60 220. 57.60 220. 57.60 220.	0 166.70 241. 166.70 241. 171.40 241. 0 172.40 241. 0 172.40 241. 0 159.60 241. 0 159.60 241. 0 175.30 262. 0 176.30 262. 0 176.30 262. 0 176.30 262.	0 171.80 0 169.80 0 169.80 0 169.80 0 169.80	20000000000000000000000000000000000000			
1991 10 167 501 511 512 511 10 10 10 10 10 10 10 10 10 10 10 10 1	209.10 167.60 214.90 217.25 124.5 209.10 172.40 214.40 220.50 170.6 209.10 172.40 219.40 220.50 170.6 209.10 175.30 219.40 220.50 170.6 209.10 175.30 219.40 220.50 170.6 220.90 10 175.30 219.40 220.50 1033.9 220.90 10 175.30 219.40 220.60 1033.9 222.60 105.60 220.40 221.80 201.4 222.60 105.60 220.40 221.80 221.4 222.60 105.60 230.40 221.80 221.4 222.60 100.60 233.40 221.80 221.4 227.40 205.60 235.70 231.80 221.4 237.40 205.60 235.70 221.4 237.40 202.70 241.20 245.90 221.4 237.40 200.30 241.20 245.90 221.4 237.40 200.30 241.20 245.90 221.4 224.50 194.00 241.90 245.90 221.4 225.60 104.50 241.90 225.70 225.7 226.20 204.50 241.90 253.70 225.7 226.20 204.50 241.90 253.70 225.7 226.20 204.50 241.90 253.70 225.7 227.20 204.90 241.90 253.70 225.7 227.20 204.90 241.90 253.70 225.7 227.20 204.90 241.90 253.70 225.7 227.20 204.90 241.90 253.70 225.7 227.20 204.90 241.90 253.70 225.7 227.20 204.90 241.90 253.70 225.7 227.20 204.90 242.90 263.90 221.4 275.70 204.90 242.90 263.90 221.4 275.70 204.90 242.70 240.70 243.70 245.7 275.70 204.90 242.70 240.70 243.70 245.7 275.70 211.50 241.70 241.70 245.7 275.70 211.50 241.70 241.70 245.7	255.40 1 175.70 255.40 1 175.70 255.40 1 175.70 255.40 1 175.70 255.70 1 190.5 255.70 1 190.5 255.70 1 190.5 255.70 1 190.5 255.70 1 190.5 2 255.70 1 190.5 2 255.70 1 190.5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	24. EU 180. 24. EU 180. 26. EU 194. 27. EU 208. 27. EU 220. 27. EU 220. 27. EU 220.	166.70 241. 1171.40 241. 1171.40 241. 1171.40 241. 1171.40 241. 1172.40 241. 1172.40 262. 1172.40 262. 1172.40 262. 1172.40 262. 1172.40 262. 1172.40 262. 1172.40 262.	0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 169.80				
200 11 10 10 10 10 10 10 10 10 10 10 10 1	209.10 167.60 -14.80 ×19.50 170.6 209.10 172.40 ×19.40 ×19.50 176.8 209.10 175.30 ×19.40 ×20.60 176.8 209.10 176.30 ×18.40 ×20.60 176.9 222.60 105.30 ×13.40 ×20.70 103.9 222.60 106.50 ×20.40 ×20.70 103.9 222.60 106.60 ×20.40 ×21.80 ×21.40 ×	255.40 171.0 255.40 171.0 255.90 171.0 255.90 171.0 255.90 170.3 20 255.3 20 170.3 2 255.3 20 170.3 2 255.3 20 170.3 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 211.0 2 255.40 2 255.50	24. cd 186. cd 186. cd 186. cd 186. cd 186. cd 197. cd 187. cd	0 166.80 241. 0 171.40 241. 0 174.70 241. 0 169.90 241. 0 169.90 241. 0 169.90 241. 0 169.90 261. 0 175.30 262. 0 175.30 262. 0 175.30 262. 0 175.30 262. 0 175.30 262. 0 175.30 262. 0 176.20 262. 0 161.20 262.	0 171.60 0 171.60 0 171.60 0 171.60 0 171.60 0 171.80 0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 169.80			000000000000000000000000000000000000000	
200 117 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	209.10 172.40 <19.40 220.50 175.8 209.10 175.8 209.10 175.8 219.40 220.50 175.8 209.10 175.8 20.215.40 220.50 175.8 209.10 175.8 219.40 220.50 175.8 209.10 175.3 219.40 221.8 20 189.3 222.60 185.0 220.40 219.40 221.8 20.2 222.60 185.0 223.8 20 221.4 222.60 185.8 20.2 23.8 20.2 23.8 20.2 222.60 185.8 20.2 23.8 20.2 23.8 20.2 222.60 185.8 20.2 23	0 255.90 173.00 255.90 174.30 255.90 1740.3 20 255.30 1740.4 20 255.30 1740.4 20 255.30 1740.4 20 255.30 1740.4 20 255.30 1740.4 20 275.40 20 275.40 211.6 2 225.50 2	74.60 186.50 197	171.40 241. 0 172.40 241. 0 169.90 241. 0 169.90 241. 0 159.00 241. 0 159.90 241. 0 175.30 262. 0 175.30 262. 0 172.30 262. 0 173.10 262. 0 173.10 262. 0 150.60 262. 0 150.60 262.	0 171.60 0 171.60 0 171.60 0 171.60 0 171.60 0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 169.80 0 169.80	11111111111111111111111111111111111111			
22210 175-35 171-50 171	209.10 175.50 215.40 220.50 175.60 219.10 175.50 215.40 220.50 105.59 220.50 175.50 215.40 220.50 105.59 220.90 175.50 215.40 220.50 105.59 220.90 175.50 215.40 221.50 221.50 222.50 105.50 222.50 105.50 231.50 221.40 222.50 105.50 231.50 201.70 222.50 105.50 231.50 201.70 222.50 20.50 231.50 221.40 222.50 20.50 231.50 221.40 222.50 20.50 231.50 221.40 222.50 20.50 231.50 221.40 222.50 20.50 231.50 221.40 222.50 20.50 231.50 221.40 232.50 20.50 231.50 221.40 232.70 20.50	0 255.90 199.3 0 255.90 199.3 0 255.90 190.3 0 255.90 190.3 0 255.90 190.3 0 255.90 190.3 0 255.90 190.3 0 255.90 190.3 0 255.90 190.3 0 275.40 204.6 0 275.40 204.6 0 275.40 204.6 0 275.40 2011.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 225.5 0 22	56.80 197. 56.80 197. 56.80 197. 56.80 197. 56.80 197. 56.80 197. 56.80 208. 57.80 208. 57.80 208. 57.80 220. 57.80 220. 57.80 220. 57.80 220.	172.40 241. 0 174.70 241. 0 169.40 241. 0 159.00 241. 0 155.30 262. 0 172.40 262. 0 173.10 262. 0 173.10 262. 0 173.10 262. 0 173.10 262. 0 160.60 262. 0 161.20 262.	0 171.60 0 171.60 0 171.60 0 171.60 0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 169.80 0 169.70	1115 1116 1116 1116 1116 1116 1110 1110		000000000000000000000000000000000000000	
222.00 105.00 213.40 231.00 123.50 225.70 110.50 105.00 197.50 101.00 241.50 111.80 116.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	209.10 175.3u 218.40 220.eu 185.9 209.10 175.3u 218.40 228.60 183.9 222.60 185.0u 220.40 221.eu 189.3 222.60 185.0u 220.40 221.eu 189.3 222.60 186.60 233.40 231.eu 221.4 222.60 186.60 233.40 231.eu 221.4 222.60 186.60 233.40 231.eu 221.4 222.60 200.10 235.7u 231.eu 221.4 237.40 205.60 233.40 240.10 221.4 237.40 205.60 239.40 240.10 221.4 237.40 200.30 241.20 245.90 221.4 237.40 200.30 241.20 245.90 221.4 237.40 200.30 241.20 245.90 221.4 237.40 194.00 241.3u 245.9u 235.7 237.40 194.00 241.3u 245.9u 235.7 256.80 192.9u 260.0u 263.9u 235.7 256.8u 194.0u 241.3u 245.9u 235.7 257.4u 200.3u 200.0u 263.9u 235.7 256.3u 200.3u 200.0u 263.9u 235.7 257.7u 212.7u 231.9u 233.1u 245.7u 245	0 255.96 190.5 0 255.96 190.5 0 255.90 190.5 0 255.90 190.5 0 267.00 190.5 0 267.00 199.6 0 267.00 199.6 0 275.40 204.6 0 275.40 204.6 0 275.40 211.8 0 275.40 211.8 0 275.40 211.8	58.60 197. 58.60 197. 58.60 197. 58.60 197. 58.60 197. 57.60 208. 67.60 220. 67.60 220. 67.60 220. 67.60 220.	174,70 241. 0 159,90 241. 0 159,90 241. 0 159,00 241. 0 159,00 262. 0 175,30 262. 0 175,30 262. 0 172,90 262. 0 170,20 262. 0 150,00 262. 0 150,00 262.	0 171.60 0 171.60 0 171.60 0 171.60 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 169.00 0 169.10 0 169.10 0 168.70	200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		000000000000000000000000000000000000000	
222.00 105.00 213.49 224.70 1033.90 255.70 109.00 197.00 169.90 271.00 116.00 176.00 1	209.10 175.30 219.40 228.60 143.9 220.90 175.30 213.40 227.70 183.9 222.60 185.00 2219.40 231.80 183.9 222.60 185.00 2219.40 231.80 211.9 222.60 185.00 230.40 231.80 221.4 222.60 185.60 233.40 231.80 221.4 222.60 200.10 235.70 231.90 221.4 237.40 205.60 235.70 231.90 221.4 237.40 205.60 239.40 240.10 221.4 237.40 205.70 241.20 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 204.30 241.20 245.40 243.5 237.40 194.00 241.20 245.40 243.5 237.40 194.00 241.20 245.40 243.5 237.40 194.00 241.20 245.40 243.5 237.40 194.00 241.20 245.40 243.5 237.40 194.00 241.20 245.40 243.5 237.40 240.30 241.20 245.40 243.5 256.20 192.70 240.00 253.90 221.4 225.20 204.50 260.00 253.90 221.4 225.20 204.50 260.00 253.90 221.4 225.20 204.50 260.00 253.90 221.4 225.20 204.50 260.00 253.90 221.4 225.20 204.50 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 253.90 221.4 225.20 204.20 260.00 223.90 221.4 225.20 204.20 260.00 223.90 221.4 225.20 204.20 200.00 223.90 221.4 225.20 204.20 200.00 223.90 221.4 225.20 204.20 200.00 223.90 221.4 225.20 204.20 200.00 223.90 221.4 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.30 203.90 203.90 225.20 204.20 204.20 204.20 204.20 225.20 204.20 204.20 204.20 204.20 225.20 204.20 204.20 204.20 204.20 225.20 204.20 204.20 204.20 204.20 225.20 204.20 204.20 204.20 204.20 225.20 204.20 204.20 204.20 204.20 225.20 204.20 204.20	0 255.30 190.3 0 255.30 130.3 0 267.90 130.3 0 267.00 130.3 0 267.00 130.3 0 267.00 139.0 0 275.40 203.7 0 275.40 204.6 0 275.40 211.8 0 275.40 211.8 0 275.40 211.8 0 275.40 211.8	56.60 197. 558.80 197. 558.80 197. 558.80 197. 558.80 197. 57.80 220. 67.80 220. 67.80 220. 67.80 220. 67.80 220.	0 169.90 241. 0 151.60 241. 0 159.00 241. 0 157.40 262. 0 175.30 262. 0 173.10 262. 0 173.10 262. 0 173.10 262. 0 150.20 262. 0 150.60 262. 0 151.20 262.	0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 168.70 0 168.70	1111 1111 1111 1111 1111 1111 1111 1111 1111		000000000000000	
222, 60 119, 63 213 40 231, 60 1134, 91 255, 94 124, 95 154, 90 241, 50 117, 90 117, 90 117, 90 117, 90 112, 92 25, 90 118, 90 213, 90 213, 90 213, 94 124, 95 154, 95 157, 95 154, 95 255, 95 117, 90	220.90 176.30 213.40 223.80 189.3 222.60 185.00 219.40 231.80 189.3 222.60 186.00 230.40 231.80 221.4 222.60 186.60 233.40 231.80 221.4 222.60 186.60 233.40 231.80 221.4 222.60 200.10 235.70 231.80 221.4 223.40 205.60 235.70 231.80 221.4 237.40 205.60 235.70 231.80 221.4 237.40 205.60 239.40 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 200.30 241.20 245.90 221.4 237.40 200.30 241.20 245.90 221.4 237.40 200.30 241.30 245.90 221.4 237.40 200.30 241.30 245.90 221.4 256.30 194.00 241.30 225.70 225.7 256.30 194.00 241.30 225.70 225.7 256.30 194.00 241.30 225.70 225.7 256.30 203.30 241.30 253.70 225.7 257.30 203.30 243.30 253.10 225.7 257.70 203.30 243.30 243.30 243.7 275.70 203.30 243.30 243.30 243.7 275.70 203.30 243.70 243.30 243.7 275.70 203.30 243.70 243.30 243.7 275.70 213.30 243.70 243.30 243.7 275.70 213.30 243.70 243.30 243.7	255.70 170.3 0 255.90 170.3 0 267.00 170.3 0 267.00 170.3 0 267.00 170.0 0 267.00 179.0 0 275.40 203.7 0 275.40 204.6 0 275.40 201.0 0 275.40 211.0 0 275.40 211.0 0 275.40 211.0	58.80 197.55 80 197.55 80 197.50 80 197.50 80 197.50 80 197.50 80 187.80 80 187.80 80 187.80 80 180	159.00 241. 159.00 241. 167.40 261. 175.30 262. 175.30 262. 172.40 262. 173.10 262. 174.20 262. 150.60 262. 150.60 262. 161.20 262.	0 171.80 0 171.80 0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 168.70 0 168.70 0 168.70	116.60 11			
222.00 100.00 2319 0 231.00 10	222.60 185.00 219.40 231.60 189.3 222.60 186.60 230.40 231.80 221.4 222.60 186.60 235.40 231.80 221.4 222.60 186.60 235.70 231.60 221.4 222.60 200.10 235.70 231.60 221.4 222.60 200.10 235.70 231.60 221.4 237.40 205.60 235.70 244.10 221.4 237.40 202.70 241.20 244.10 221.4 237.40 203.70 241.20 245.40 223.7 237.40 203.70 241.20 245.40 223.7 250.80 192.90 241.90 245.90 235.7 254.10 194.00 241.90 245.90 235.7 254.50 194.00 241.90 257.70 235.7 254.50 194.00 241.90 257.70 235.7 254.50 194.00 241.90 257.70 235.7 254.50 194.00 241.90 253.70 226.4 252.70 203.80 204.90 253.70 253.7 254.50 203.80 204.90 253.70 253.7 255.70 203.80 204.90 255.00 253.7 255.70 203.80 204.90 255.00 253.7 255.70 203.80 204.90 255.00 253.7 255.70 203.80 204.90 255.00 255.7 275.70 203.80 204.90 255.00 275.7 275.70 203.80 203.80 203.7 275.70 203.80 203.80 203.7 275.70 203.80 203.80 203.7 275.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277.70 203.80 203.7 277	255.40 170.3 2 267.00 170.3 0 267.00 170.3 0 267.00 170.3 0 275.40 204.6 0 275.40 204.6 0 275.40 204.6 0 275.40 204.6 0 275.40 204.6 0 275.40 211.6 0 275.40 211.6	556.60 197. 51.50 208. 51.50 208. 51.50 208. 51.50 208. 51.50 208. 51.50 220. 51.50 220. 51.50 220. 51.50 220. 51.50 220.	159 00 241 160 40 241 167 40 261 175 30 262 175 30 262 177 90 262 178 10 262 178 10 262 169 262 161 20 262 161 20 262	171.60 0 171.60 0 171.80 0 171.80 0 169.80 0 169.80 0 168.80 0 168.70 0 168.70 0 168.70	117.00 118.80 118.80 118.80 118.80 118.70 119.70 119.70 119.70		9990000000000	
222.00 100-00 2510 to 211.00 221.00 227.00 1710 to 101.00 1112.00 112.00 112.00 112.00 112.00 112.00 112.00 11	222.60 146.60 230.40 231.80 221.4 222.60 146.60 233.40 231.00 221.4 222.60 100.60 233.40 231.00 221.4 222.60 200.10 235.70 231.00 221.4 223.40 205.60 235.70 231.00 221.4 237.40 205.60 239.40 244.10 221.4 237.40 203.70 241.20 245.20 221.4 237.40 204.30 241.20 245.90 221.4 237.40 194.00 241.20 245.90 235.7 250.80 192.90 241.30 245.90 235.7 250.80 192.90 241.30 245.90 235.7 254.50 194.00 241.30 245.90 235.7 254.50 194.00 241.30 245.90 255.7 254.50 203.30 241.30 255.70 226.6 254.50 203.30 250.00 253.90 221.4 252.30 203.30 253.90 253.90 251.4 252.30 203.30 253.90 253.00 253.9 252.30 203.30 253.90 253.00 253.7 252.30 203.30 253.90 263.90 263.7 255.70 203.30 253.90 263.90 263.7 255.70 203.30 253.90 263.90 263.7 255.70 203.30 253.90 263.90 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 253.90 263.10 263.7 255.70 203.30 203.30 263.90 263.7 255.70 203.30 203.30 263.90 263.7 255.70 203.30 203.30 263.90 263.7 255.70 203.30 203.30 263.90 263.7 255.70 203.30 203.30 263.90 263.7 255.70 203.30 203.30 263.90 263.7 255.70 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.30 203.7 203.30 203.30 203.30 203.7 203.30 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.30 203.7 203.30 203.7 203.30 203.7 203.30 203.7 203.30 203.7 203.30 203.7 203.30 203.7 203.	267.00 170.3 0 267.00 170.3 0 267.00 179.6 0 257.00 174.7 0 275.40 204.8 0 275.40 204.8 0 275.40 211.8 0 275.40 211.8 0 275.40 211.8 0 275.40 211.8	554.80 197. 554.80 197. 557.80 208. 67.80 220. 67.80 220. 67.80 220. 67.80 220. 67.80 220.	167.40 262. 115.30 262. 175.30 262. 175.30 262. 172.90 262. 173.10 262. 150.20 262. 150.60 262. 161.20 262. 164.80 262.	0 171-80 0 171-80 0 171-80 0 169-80 0 169-80 0 169-80 0 169-10 0 169-10 0 168-70				
222 25 10 10 25 3 1 2 1 2 1 1 2 1 1 2 1 2 1 2 1 2 1 2 1	222.60 180.60 250.40 251.00 221.4 222.60 180.60 253.40 251.00 221.4 222.60 200.10 255.70 251.00 221.4 227.40 205.60 255.70 254.20 221.4 237.40 205.60 259.40 244.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 200.30 241.20 245.40 243.5 257.40 200.30 241.20 245.40 245.5 257.40 194.00 241.20 245.40 245.7 250.80 192.90 241.20 245.40 255.7 254.50 194.00 241.30 245.40 255.7 254.50 194.00 241.30 245.40 255.7 254.50 194.00 241.30 245.40 255.7 254.50 194.00 241.30 255.70 255.7 254.50 194.00 241.30 255.70 255.7 254.50 194.00 241.30 255.70 255.7 255.70 204.50 260.00 263.90 221.4 257.70 204.50 260.00 263.90 221.4 275.70 204.50 260.00 263.90 221.4 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 265.7 275.70 204.30 265.30 265.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.30 204.10 255.30 204.50 275.70 204.10 204.10 255.30 204.50 275.70 204.10 204.10 204.30 204.50 275.70 204.20 204.10 204.30 204.50 275.70 204.20 204.10 204.30 204.50 275.70 204.20 204.10 204.30 204.50 275.70 204.20 204.	267.00 190.45 0 267.00 190.45 0 267.00 194.46 0 275.40 203.7 0 275.40 204.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6 0 275.40 211.6	55.50 51.50 51.50 50.50 50.50 50.50 67.60 67.60 67.80 67.80 67.80 67.80 67.90 67	157.40 262.0175.30	0 171.80 0 171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 168.70 0 168.70 0 168.70	2000 2000 2000 2000 2000 2000 2000 200			
22. 60 10 23. 70 231. 70 221. 40 25. 70 135. 40 26. 60 159. 40 118. 90 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	222.60 189.60 255.40 251.50 221.40 221.40 222.60 200.10 255.70 251.50 221.40 221.40 222.60 200.10 255.70 251.50 221.40 222.40 200.10 251.40 221.40 222.40 200.20 200.40 200.20 201.40 220.40 200.20 221.40 223.40 200.40 200.20 221.40 223.40 200.40 200.20 221.40 223.40 200.40 20	0 267.00 195.00 2575.40 203.7 203.7 20 203.7 20 203.7 20 203.7 20 203.7 20 203.7 20 203.7 20 203.7 20 203.5 20 200.5 203.5 203.5 20 203.5 203	67.80 220.67.80	175.40 262.0 175.30 262.0 175.30 262.0 173.10 262.0 173.10 262.0 155.0 1	171.80 0 171.80 0 169.80 0 169.80 0 169.80 0 169.80 0 168.70 0 168.70	100 100 100 100 100 100 100 100 100 100			
227.66 20.310 235.40 231.40 221.40 227.00 199.60 115.00 262.60 115.00 116.80 0.0 0.0 0.0 0.0 222.60 22.60 20.310 235.40 231.40 221.40 227.00 199.60 116.80 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	222.60 100.60 255.40 251.50 221.4 222.60 200.10 255.70 251.97 221.4 222.60 200.10 255.70 251.97 221.4 237.40 205.60 255.70 254.20 221.4 237.40 202.70 243.40 244.10 221.4 237.40 202.70 241.20 244.10 221.4 237.40 200.30 241.20 245.40 223.4 237.40 200.30 241.20 245.40 223.4 250.40 194.00 241.20 245.90 255.7 250.40 194.00 241.30 245.90 255.7 254.50 194.00 241.30 255.70 255.7 254.50 194.00 241.30 257.70 255.7 254.50 194.00 241.30 257.70 255.7 254.50 194.00 241.30 257.70 255.7 254.50 194.00 241.30 257.70 255.7 254.50 204.50 200.00 263.90 221.4 262.30 204.50 260.00 263.90 221.4 262.30 204.50 260.00 263.90 221.4 262.30 204.50 260.00 263.90 221.4 262.30 204.50 260.00 263.90 221.4 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 260.00 263.00 263.7 262.30 204.50 263.00 263.00 263.7 262.30 204.50 264.70 263.70 263.7 275.70 243.70 243.70 263.70 243.70 245.7	0 267.00 196.0 0 257.00 199.0 0 275.40 203.2 0 275.40 204.6 0 275.40 204.6 0 275.40 211.0 0 275.40 211.0 0 275.40 211.0 0 275.40 211.0 0 275.40 223.5	61.50 2000 50 50 50 50 50 50 50 50 50 50 50 50 50 5	1/5,50 262, 0 175,30 262, 0 178,30 262, 0 178,10 262, 0 153,10 262, 0 150,50 262, 0 160,60 262, 0 164,80 262,	0 1/1,80 0 169,80 0 169,80 0 170,00 0 168,80 0 169,10 0 168,70 0 168,70	18.80 118.80 118.90 118.90 11.10 21.70 21.70 24.40		0000000000	
222.6 0 200.10 253.7 0 251.4 0 251.4 0 275.4 0 1999.6 0 199.7 0 175.30 262.6 0 199.6 0 118.7 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	222.60 200.10 235.70 231.91 221.4 227.60 200.10 235.70 231.00 221.4 237.40 205.60 235.40 244.10 221.4 237.40 205.60 235.40 244.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 200.30 241.20 245.40 223.4 237.40 200.30 241.20 245.40 223.4 237.40 200.30 241.20 245.40 223.4 237.40 200.30 241.20 245.40 223.4 250.80 194.00 241.30 245.40 225.7 250.80 194.00 241.30 245.40 225.7 254.50 194.00 241.30 225.70 235.7 254.50 194.00 241.30 257.70 235.7 254.50 194.00 241.30 253.70 235.7 254.50 194.00 241.30 253.70 235.7 254.50 194.00 240.00 263.90 221.4 255.70 204.50 260.60 275.60 221.4 275.70 204.30 243.00 275.60 271.4 275.70 204.30 243.00 243.10 245.7 275.70 204.30 243.00 243.10 245.7 275.70 204.30 243.00 243.10 245.7 275.70 204.30 243.10 243.7 275.70 204.30 243.10 243.7 275.70 211.10 241.70 241.30 243.7	257.00 199.6 275.40 204.6 275.40 204.6 275.40 204.6 275.40 211.8 275.40 211.8 275.40 211.8 275.40 211.8	55.00 208. 27.00 209. 27.00 220. 67.00 220. 67.00 220. 67.00 220. 67.00 220.	175.30 262. 0 172.90 262. 0 173.10 262. 0 153.10 262. 0 155.00 262. 0 150.60 262. 0 164.80 262.	0 169.80 0 169.80 0 170.00 0 169.80 0 169.80 0 168.70 0 168.70	18.90 18.90 18.70 18.70 20.50 21.10 21.70 24.40		000000000	00000000000
23.40 20.50 24.40 253.40 221.40 275.40 203.50 172.40 202.50 110.90 0110.90 010.00 000 000 033.40 233.40 203.40 275.40 203.50 120.70 120.50 0110.90 0110.90 010.00 000 033.40 233.40 203.40 275.40 203.40 275.40 203.40 275.40 203.40 275.40 203.40 275.40 203.60 203.60 203.60 110.90 0110.90 010.00 000 000 033.40 203.40 275.40 203.40 275.40 203.40 275.40 203.40 275.40 203.40 275.40 203.40 275.40 203.40 275.40 27	222.60 205.40 255.70 251.00 221.4 237.40 205.60 255.70 254.20 221.4 237.40 202.50 259.40 294.10 221.4 237.40 202.70 259.40 294.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 202.70 241.20 245.40 225.4 237.40 200.30 241.20 245.40 225.7 250.80 194.00 241.90 245.90 255.7 254.50 194.00 241.90 245.90 255.7 254.50 194.70 240.00 253.70 226.7 254.50 194.70 240.00 253.70 226.7 254.50 194.70 250.00 253.70 226.7 254.50 204.50 250.00 253.00 253.7 252.70 204.50 250.00 253.00 253.7 252.70 204.50 250.00 253.00 253.7 252.70 204.50 250.00 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.20 275.60 271.4 275.70 204.90 256.30 275.60 271.4 275.70 204.90 256.30 275.60 271.4 275.70 204.90 275.70 275.70 285.70 275.70 214.10 274.10 277.70 277.70 277.70 275.70 214.10 274.10 277.70 277.70 405.00	275.40 203.7 275.40 204.6 275.40 204.6 275.40 204.6 275.40 211.8 275.40 211.8 275.40 221.8 275.40 223.5	53.00 209. 67.00 218. 67.00 220. 67.00 220. 67.00 220. 67.00 220. 67.00 220.	172.90 262. 0 173.10 262. 0 170.20 262. 0 153.10 262. 0 150.60 262. 0 161.20 262.	169.80 0 170.60 0 169.80 0 168.80 0 168.70 0 168.70 0 169.30	118.90 118.70 20.50 21.10 21.50 21.50		00000000	0000000000
237.40 202.50 243.40 253.40 253.40 275.40 201.00 210.30 105.00 202.60 160.10 118.70 010 010 010 010 010 010 010 010 010 0	237.40 205.60 255.70 254.20 221.4 237.40 205.60 259.40 254.20 221.4 237.40 202.70 244.20 244.10 221.4 237.40 202.70 241.20 244.10 221.4 237.40 200.30 241.20 245.90 223.4 257.40 200.30 241.20 245.90 223.7 250.80 192.90 241.90 245.90 255.7 254.50 194.00 241.90 245.90 255.7 254.50 194.00 241.90 257.70 255.7 254.50 194.00 241.90 257.70 255.7 254.50 194.00 241.90 257.70 253.9 262.90 202.00 250.00 253.90 221.4 262.90 203.30 250.00 253.90 221.4 262.90 203.30 250.00 253.90 251.4 262.90 203.30 250.00 253.90 251.4 262.90 203.30 250.00 255.60 254.3 262.90 203.30 250.30 275.60 271.4 262.90 203.30 250.30 275.60 271.4 275.70 203.30 250.30 275.60 271.4 275.70 203.30 250.30 275.60 271.4 275.70 203.30 250.30 275.60 271.4 275.70 203.30 250.30 275.60 271.4 275.70 203.30 273.30 273.30 272.6 275.70 213.30 273.30 273.30 273.6	275,40 203,7 275,40 204,6 275,40 204,6 275,40 211,8 275,40 211,8 275,40 217,0 275,40 223,5 275,40 223,5	67.60 £20. 67.60 £20. 67.80 £20. 67.80 £20. 67.80 £20. 67.80 £20.	0 173.10 262. 0 170.20 262. 0 153.10 262. 0 158.50 262. 0 150.60 262. 0 151.20 262.	0 169.80 0 170.00 0 168.80 0 169.10 0 168.70 0 168.70 0 168.70	18.70 20.50 21.10 21.70 21.70		0000000	
237 40 2015, 0 239 40 254 20 221140 275 40 2015 10 2015 10 2015 10 10 10 10 10 10 10 10 10 10 10 10 10	237.40 205.50 259.40 254.20 221.4 237.40 202.70 241.20 240.10 221.4 237.40 200.30 241.20 240.10 221.4 237.40 200.30 241.20 245.40 255.7 237.40 194.00 241.30 245.90 255.7 250.80 192.90 241.90 257.70 255.7 254.50 194.00 241.90 257.70 255.7 254.50 194.00 241.90 257.70 255.7 254.50 194.00 241.90 257.70 255.7 254.50 194.00 241.90 257.70 255.7 254.50 194.00 240.00 253.90 221.4 255.70 204.50 250.00 253.90 221.4 255.70 204.50 250.00 253.90 221.4 255.70 204.50 250.00 253.90 221.4 257.70 204.50 250.00 253.90 221.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4	275.40 204.6 275.40 201.6 275.40 211.8 275.40 211.8 275.40 211.0 275.40 227.0 277.40 228.5	67.60 220. 67.80 220. 67.80 220. 67.80 220. 67.80 220.	174.20 262. 153.10 262. 153.10 262. 160.60 262. 0 161.20 262. 164.80 262.	0 170.00 0 168.80 0 168.10 0 168.70 0 168.70 0 168.70	221.30 221.30 221.30 221.50		0000000	
237.40 2012 201.00 249.40 240.40 275.40 240.40 167.80 220.20 105.10 222.60 169.70 121.10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	237.40 202.70 239.40 240.10 221.4 237.40 202.70 241.20 240.10 221.4 237.40 200.30 241.20 245.40 225.7 257.40 200.30 241.20 245.90 225.7 250.80 194.00 241.90 245.90 235.7 250.80 192.90 241.90 245.90 235.7 254.10 194.00 241.90 257.70 225.7 254.10 194.20 241.90 257.70 225.7 254.20 194.70 240.00 263.90 221.4 254.50 194.70 250.00 263.90 221.4 255.30 203.80 241.90 253.90 221.4 252.90 203.80 245.90 255.00 255.7 262.90 203.80 245.90 275.90 255.7 275.70 203.90 245.90 285.10 245.7 275.70 203.90 245.00 245.90 247.4 275.70 203.90 245.00 245.90 247.4 275.70 203.90 243.10 245.7 275.70 203.90 243.10 245.7 275.70 213.90 243.10 245.7 275.70 213.90 243.10 243.30 243.7 275.70 213.90 243.10 243.30 243.7	275,40 204.0 275,40 211.8 275,40 211.8 275,40 211.8 275,40 211.8 275,40 221.8 280.90 228.5	67.86 220 67.86 220 67.80 220 67.80 220 67.80 223 70.40 223	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	168.80 0 168.10 0 168.70 0 168.70 0 168.70	20.50 21.10 21.50 21.50			
237.40 200.370 241.20 240.10 221.40 275.41 211.40 167.80 220.20 1001.40 262.60 1001.01 121.10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	237.40 202.70 241.20 240.10 221.4 237.40 200.30 241.20 245.40 225.4 237.40 200.30 241.20 245.40 225.7 250.40 194.00 241.90 245.90 235.7 250.40 194.00 241.90 245.90 235.7 254.50 194.00 241.90 253.70 226.4 254.50 194.70 240.00 253.70 226.4 254.50 194.70 250.00 253.70 226.4 254.50 194.70 250.00 253.90 221.4 254.50 204.50 250.00 253.90 221.4 252.70 204.50 250.00 253.00 253.7 252.70 204.50 250.00 275.60 271.4 252.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.00 275.60 271.4 275.70 204.90 250.70 250.80 314.3	275.40 201.6 275.40 211.6 275.40 211.6 275.40 211.8 275.40 221.8 221.40 223.5	67.80 220. 67.80 220. 67.80 220. 67.80 220. 70.40 225.	100.10 ABC. 0 100.60 ABC. 0 161.20 ABC. 0 164.60 ABC.	0 169.10 0 168.70 0 168.70 0 168.70	21.10 21.10 21.70 24.40			
237 40 200.30 241.20 245.40 245.40 245.40 105.80 220.20 105.60 105.10 121.71 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	237.40 200.70 241.20 245.40 223.4 237.40 200.30 241.20 245.40 223.5 237.40 200.30 241.20 245.40 223.7 250.80 192.90 241.90 245.91 255.7 250.80 192.90 241.90 245.70 255.7 254.50 192.90 241.90 257.70 255.7 254.50 192.70 200.00 263.90 221.4 262.90 202.00 200.00 263.90 221.4 262.90 203.30 263.90 275.00 225.7 262.90 203.30 263.90 275.00 255.7 262.90 203.30 263.90 275.00 255.7 262.90 203.30 263.90 275.00 255.7 262.90 203.30 263.90 275.00 255.7 262.90 203.30 263.90 275.00 255.7 262.90 203.30 263.90 275.00 255.7 275.70 203.30 203.30 203.30 204.3 275.70 203.30 203.30 203.30 204.3	275,40 206,6 275,40 211,8 275,40 211,0 275,40 211,0 275,40 228,0 275,40 228,0	67.80 220. 67.80 220. 67.80 220. 67.80 223. 70.40 223.	0 15%,e0 262. 0 160,60 262. 0 161,20 262. 0 165,80 262.	0 169.10 0 166.70 0 166.70 0 168.70	21.10 21.70 24.40		00000	
237.40 200.30 241.50 245.40 235.70 275.41 211.60 167.80 224.20 104.60 168.70 121.50 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	237,40 200,30 241,20 245,40 223,5 237,40 200,30 241,20 245,90 235,7 250,40 194,00 241,90 245,90 235,7 250,80 192,90 241,90 245,90 235,7 254,10 194,50 241,90 257,70 235,7 254,50 194,70 240,00 253,90 221,4 254,50 194,70 240,00 263,90 221,4 254,50 202,00 250,00 263,90 221,4 252,90 202,00 250,00 263,90 221,4 262,90 202,30 250,00 253,90 221,4 262,90 202,30 250,00 253,90 251,4 262,90 202,30 250,00 253,90 251,4 262,90 202,30 250,00 275,60 255,7 262,90 202,30 253,90 255,7 262,90 202,30 253,90 253,90 255,7 262,90 202,30 253,90 263,10 265,7 275,70 202,30 253,90 242,7 275,70 212,70 237,30 237,30 232,2 275,70 213,50 237,70 237,30 493,50	275.40 211.8 275.40 211.8 275.40 217.8 275.40 227.0 275.40 228.5 280.90 228.5	67.80 220. 67.80 220. 67.80 223. 67.80 223.	0 160.60 262. 0 161.20 262. 0 164.60 262. 0 165.80 262.	0 168.70 0 168.70 0 168.70 0 169.30	21.70 21.50 24.40		0000	
237,40 194,00 241,30 245,40 235,40 275,40 211,60 167,80 225,80 166,90 262,60 166,70 124,40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	237.40 200.30 241.20 245.90 205.7 25.7 40 194.00 241.90 245.91 255.7 250.80 194.00 241.90 245.91 255.7 250.80 192.90 241.90 254.70 255.7 254.50 192.90 241.90 255.7 70 255.7 254.50 192.7 70 255.7 254.50 192.7 70 255.7 254.50 192.7 70 255.7 254.50 192.7 70 255.7 254.50 192.7 70 255.7 254.50 192.7 70 255.7 252.7 2	275,40, 211.6 275,40, 211.8 275,40, 217.0 275,40, 228.5 280,90, 228.5	67.80 220. 67.80 223. 67.80 225. 70.40 229.	0 161.20 262. 0 164.60 262. 0 166.80 262.	0 168.70 0 168.70 0 169.30	21,50	00	000	0000
257.40 194.00 241.30 245.40 235.40 211.60 167.80 225.80 104.80 262.60 169.70 124.40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	237.40 194.00 241.90 245.90 235.7 250.80 194.00 241.90 245.90 235.7 259.80 194.00 241.90 245.90 235.7 259.80 201.90 255.7 259.80 201.90 255.7 259.80 201.90 255.7 259.80 201.90 255.7 259.80 201.90 255.7 259.80 201.90 255.90 221.90 255.90 201.90 255.90 221.90 255.90 201.90 255.90 221.90 255.90 201.90 255.90 201.90 255.90 201.90 255.70 201.90 205.90 205.90 205.70 205	275,46 211,6 275,40 217,0 275,40 228,5 271,40 223,5 286,5 286,5 286,5 286,5	67.80 225. 67.80 225. 70.40 229.	0 154.80 262. 0 155.80 262.	0 168.70	24.40	.0	000	000
250 400 194, 000 241, 30 245, 50 255, 70 275, 40 217, 00 167, 40 229, 20 166, 80 2226 165, 30 124, 70 0 010, 000 000 255, 70 275, 40 227, 50 175, 10 259, 50 167, 00 222, 60 170, 10 125, 50 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	250.40 194.00 241.90 245.9u 255.7 250.80 192.90 241.90 257.70 255.7 255.	275,40 217.0 275,40 228.5 275,40 225.5 280.90 223.5	67.80 225. 70.40 229.	0 166.80 262.	0 169.30	24.70			
259.80 192.90 241.90 257.70 255.70 275.40 228.50 170.40 229.30 167.00 262.60 170.10 125.80 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	250.80 192.90 241.90 257.70 255.7 254.10 196.50 260.00 257.70 255.7 254.50 194.70 260.00 253.70 228.6 254.50 194.70 260.00 253.70 228.6 254.50 194.70 260.00 253.70 228.6 254.50 194.50 260.00 253.90 221.4 262.90 204.50 260.60 273.90 253.9 262.90 262.90 204.50 263.90 275.00 255.7 262.90 204.50 263.90 264.3 262.7 262.90 204.90 263.10 265.7 262	275,40 228,5 275,40 223,5 280,90 223,5	0.40 229.	167 00 262			0	•	9,0
254.10 190.30 260.00 257.70 253.70 274.0 2253.50 175.10 250.00 169.10 262.60 170.20 126.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	254.10 1945.50 260.00 257.70 225.70 254.50 194.70 240.00 253.70 228.6 254.50 194.70 240.00 253.70 228.6 254.50 194.70 240.00 253.90 221.9 254.50 202.00 263.90 221.9 262.90 204.50 200.00 263.90 221.9 262.90 240.80 240.20 240.20 240.20 240.20 240.20 240.20 240.90	280.90 223.5	4 10 0 40			0 0 0			• •
254.50 1942.70 2010 0 255.70 2284.00 273.50 175.10 240.00 199.00 262.60 177.20 126.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	254.50 194.70 250.00 253.70 226.6 254.50 194.70 250.00 253.70 226.6 254.50 194.70 250.00 253.70 226.6 254.50 194.70 250.00 253.70 226.6 254.50 202.00 253.90 221.4 252.00 203.90 203.90 203.90 203.90 203.90 203.90 203.90 203.70 205.70	280.90 223.5		0 10 10 10 EBE		0000	•	•	•
254.50 199.70 263.50 221.40 220.90 223.50 173.10 245.60 1169.10 262.60 174.20 126.80 0.0 0.0 0.0 0.0 0.0 254.50 199.70 263.90 221.40 220.90 245.20 173.10 245.80 177.30 262.60 174.20 127.10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	254.50 194.70 200.00 255.70 228.6 254.50 194.70 200.00 255.90 221.4 254.50 202.00 255.90 221.4 254.50 202.00 255.90 221.4 252.90 202.00 255.90 221.4 252.90 202.00 255.90 221.4 252.90 203.90 203.90 255.7 252.90 203.90 255.7 252.90 203.90 255.7 252.90 203.90 255.7 252.90 203.90 255.7 252.90 203.90 203.90 203.7 252.90 203.7 202.90 203.90 2	280.90 223.5	0.10 630.	0 168.50 262.	01.071 0	25,30	.0	•	•
254.50 19b.70 200.00 253.90 221.40 200.90 233.00 173.10 232.00 174.20 126.80 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	254.50 190.70 250.00 263.90 221.4 254.50 202.01 250.00 263.90 221.4 262.90 204.50 260.50 275.00 253.9 262.90 204.50 265.90 275.00 253.9 262.90 204.50 263.90 275.00 255.7 262.90 204.90 265.90 275.60 271.4 262.90 200.90 265.00 275.60 271.4 275.70 200.90 266.00 277.90 265.7 275.70 203.90 245.10 245.10 245.7 275.70 212.70 204.10 247.30 242.7 275.70 213.10 204.70 297.30 405.0		3.10 250.	0 169,10 262.	0 172,20	26.00	.0	•	•
254.50 202.03 253.00 263.90 221.40 250.99 255.20 173.10 252.00 172.50 262.60 172.710 000 000 000 000 000 000 262.90 204.50 260.60 273.00 2535.90 2245.20 178.90 252.00 173.50 262.60 175.70 122.20 000 000 000 000 000 252.90 2735.00 2735.00 2535.00 255.50 177.30 252.00 177.30 262.60 175.70 122.50 000 000 000 000 000 262.90 273.60 264.50 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 275.60 271.40 250.90 271.40 250.90 275.60 271.40 250.90 271.40 250.90 275.60 271.40 250.90 271.40 250.90 275.60 271.40 250.90 271.40 250.90 275.60 271.40 250.90 271.40 250.90 275.70 271.40 250.90 275.70 271.40 250.90 275.70 271.40 250.90 275.70 271.40 250.90 275.70 271.40 250.90 275.70 271.40 250.90 275.70 271.40 27	254.50 202.00 239.00 263.90 221.4 262.30 204.50 260.60 273.00 253.9 262.30 204.30 263.90 275.00 255.7 262.30 204.30 263.90 275.00 271.4 262.30 204.30 263.00 275.60 271.4 262.30 209.30 263.00 275.00 271.4 275.70 203.30 263.00 263.10 265.7 275.70 203.30 263.00 263.10 265.7 275.70 203.30 263.00 263.00 217.4 275.70 213.50 23.30 243.70 237.30 242.7 275.70 213.50 237.70 237.30 493.00 243.70	250,96 224,5	3,10 252.	0 171,30 262.	0 174.20	26.80	.0 0.	0	•
262.90 204.50 265.60 273.00 253.30 250.96 245.20 176.90 252.00 177.10 262.60 175.70 127.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 262.90 204.30 265.90 275.00 253.70 296.96 245.20 177.10 262.60 175.70 127.20 0.0 0.0 0.0 0.0 0.0 0.0 275.00 275.00 275.50 264.50 177.10 262.60 175.70 128.50 0.0 0.0 0.0 0.0 0.0 0.0 275.00 275.50 271.40 290.96 245.20 177.30 256.10 177.30 262.60 175.70 130.90 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	262.30 204.50 260.60 273.00 253.3 262.30 203.3 265.3 90 275.00 255.7 262.30 203.30 263.30 275.00 255.7 262.30 203.	260.90 255.7	5.10 252.	169.70 262.	0 174.20	27.10			, ,
262.90 2344.80 275.00 255.70 250.90 245.20 177.30 252.00 177.00 262.60 175.00 127.20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	262.90 203.30 263.90 275.00 255.7 262.90 203.30 263.90 275.00 264.30 262.90 275.00 284.30 262.90 275.00 271.4 262.90 203.10 205.7 40 271.4 275.70 203.10 205.7 40 275.70 203.10 205.7 40 275.70 203.10 205.7 20 275.70 203.10 205.7 20 275.70 203.10 203.2 275.70 203.10 203	2000		170 60 000			•	•	•
262.90 200.90 275.60 264.30 200.90 249.60 177.30 252.00 177.10 262.60 175.70 128.50 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	262.00 200.00 205.00 275.60 284.5 262.00 200.90 200.00 275.60 284.5 262.00 200.90 206.20 275.60 271.4 275.70 200.90 206.20 285.10 285.7 275.70 200.90 206.30 206.10 285.7 275.70 200.90 235.00 260.80 314.5 275.70 210.23 23.4 26.2 30 342.6 275.70 211.50 200.70 207.30 405.0	2.0.2.0.2.0.2.0.2.0.2.0.2.0.2.0.2.0.2.0	0.70 536.	- 742 00 071 0	01.01.0	00.75	•	•	•
202.90 204.80 275.60 271.40 294.50 277.30 245.00 177.30 245.00 175.70 130.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	262.70 244.50 264.50 275.50 254.5 262.90 200.90 255.00 275.60 271.4 275.70 205.30 265.30 285.10 285.7 275.70 205.90 265.00 265.70 205.7 275.70 205.90 255.00 267.90 214.5 275.70 214.50 254.10 257.30 358.5 275.70 214.50 257.70 297.50 445.5	230.30 643.6	0.70 636.	113.80 262.	09.677.0	07.17	•	•	•
202.70 200.30 275.60 271.40 290.90 245.20 177.30 255.10 178.20 262.60 175.20 130.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	764.70 200.90 205.00 275.60 271.4 262.90 200.90 256.20 275.60 271.4 275.70 200.30 200.30 256.10 265.7 275.70 200.90 256.70 256.70 246.5 275.70 214.70 200.70 207.30 342.0 275.70 211.50 200.70 207.30 342.0	2000 40 C42 C42	1.50 Z3Z.	0 1//.10 262.	0 1/2./0	28.50		•	•
262,90 266.20 275.66 271.40 250.91 249.21 179.70 257.80 140.90 272.00 175.20 130.00 0.0 0.0 0.0 0.0 275.70 240.90 245.20 185.00 240.40 187.90 272.00 177.00 131.20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	262.90 200.90 256.20 275.60 271.4 275.70 205.30 264.90 265.10 265.7 275.70 205.90 235.00 297.90 520.6 275.70 205.90 235.79 520.6 275.70 212.70 234.70 237.30 342.7 275.70 213.50 233.70 237.30 342.7 275.70 213.10 233.70 237.30 342.7	2.045 B. Oct.	7.30 < 56.	0 1/8.20 262.	0 176,00	30.00	· · ·	•	•
775.70 205.30 254.90 283.10 285.70 280.90 245.20 185.00 240.40 187.90 272.00 177.00 151.20 0.0 0.0 0.0 0.0 0.0 275.70 205.30 255.70 273.40 255.30 273.40 255.30 273.40 255.30 273.40 255.30 273.40 273	275.70 205.30 264.90 265.10 265.7 275.70 203.30 214.5 275.70 203.90 250.60 514.5 275.70 250.60 514.5 275.70 245.90 242.6 275.70 214.50 247.50 247.50 214.50 249.70 227.50 495.0	250.91 249.C	4.70 257.	0 1dU.90 272.	0 175,20	30,00	.0	•	•
775.70 203.90 275.00 285.80 514.53 295.50 245.20 185.00 141.40 202.06 272.00 177.00 151.20 0.0 0.0 0.0 0.0 275.70 203.90 245.50 245.20 185.00 245.20 185.20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	775,79 207,70 275,00 250,80 514,3 475,70 207,90 215,00 247,90 528,5 275,70 114,70 24,16 247,30 542,6 275,70 211,5u 243,70 247,50 342,0	280.90 245.2	5.00 < 40.	U 187.90 272.	0 176.40	30,40	.0		
275.70 203.90 235.00 297.90 3288.60 293.50 245.20 165.00 242.40 213.60 277.80 180.30 131.70 0.0 0.0 0.0 0.0 275.70 213.70 244.50 247.50 242.50 293.50 244.30 132.70 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	275.70 203.90 235.00 247.90 328.6 275.70 114.70 643.10 237.30 542.6 275.70 213.50 243.70 237.50 342.0 275.70 213.10 747.70 237.50 405.0	243.70	14.00	. 442.00.412.0	0 177 00	41 50	, c		
275.70 214.70 244.10 247.30 342.60 2945.00 245.20 167.30 250.20 222.10 269.50 204.30 132.70 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	275-70 212-70 244-10 247-30 342-6 275-70 211-5u 249-70 247-50 342-6 275-70 211-10 249-70 297-50 405-9	0 4 4 C 0 4 K 6 C	7 00 047	0 013.41 077	180 40	41 70			
75.70 211.50 297.70 297.50 342.60 293.30 291.60 216.20 202.30 125.70 209.30 135.70 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	275.70 214.5u 243.7u 247.50 342.0 c75.7u 214.5u 243.7u 247.5u 445.0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0) i	•	•	•
75.70 211.10 277.50 342.50 792.70 247.50 942.50 792.70 271.50 211.50 210.80 135.10 6.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	675.70 611.10 617.70 677.50 542.6 675.70 611.10 711.70 237.50 405.0	2.73.16.24.19.60		0 555 50 503 503 503 503 503 503 503 503	00.402.0	0/ 0/	•	• ·	.
**(7.4) < 11.10 < 11.7) < 247.50 #us.cd 193.50 245.50 245.50 215.50 326.00 210.80 134.50 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	c/3./u <11.10 / 11.7u <37.50 4u5.0	2.00.00.000	.1C2 01.7	0 < 18.20 507.	08.407.0	33,10		•	٥.
287.4u 221.3u 291.2u 297.3u 426.5u 245.5u 245.2u 192.10 207.4u 214.2u 336.7u 216.7u 135.5u 0.0 0.0 0.0 0.0 0.0 299.nu 224.6.l 242.6.l 242.6.l 242.6.l 255.7u 217.6u 137.1u 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		235.56 645.6	.16 21.	0 215,50 326.	0 210.90	34.50	·0	•	•
209.00 224.61 292.40 296.60 414.50 295.56 445.20 192.10 260.60 215.40 356.70 217.60 137.10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	287.40 221.30 291.20 297.30 428.8	203-58 245-2	2.10 257.	0 214,20 336,	0 216.70	34.40	.0 0.	•	•
203 00 225.40 312.50 34.70 414.50 235.50 245.20 132.10 239.00 225.60 335.70 217.60 139.40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				0117	000			•
7.7.10 2.7.11 755.71 506.77 414.50 275.50 2475.20 192.10 258.70 217.60 159.40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		277.00 577.5		0 E + C + U JJD +	0001100	01.5	• ·		•
-0.7 00 <-c	5. 41.4 UT. 300 HC.600 M. 40.30 UT. 40.3	2.045 00.00%	2.10 ZSB.	0 219.60 336.	0 517.60	39.40	· · ·	•	۰.
209.00 225.49 311.40 316.00 414.50 303.21 245.20 200.30 289.30 226.50 365.70 250.20 140.80 0.0 0.0 0.0 0.0 0.0 (269.00 225.40 312.20 140.80 0.0 0.0 0.0 0.0 0.0 (269.00 225.40 312.20 342.10 0.0 0.0 0.0 0.0 0.0 225.40 312.20 312.20 312.70 303.20 245.20 200.30 27.80 252.40 312.20 312.20 0.0 0.0 0.0 0.0 0.0 0.0 225.40 313.20 312.20 327.70 227.70 227.70 227.70 227.70 30.70 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	203 00 200.40 234.40 515.56 403.5	343.46 641.6	3.30 Cut.	U 230.20 336.	0 222.0	U.K. 6	0 0.	0	0
269.00 22c.40 312.20 310.00 413.70 303.20 245.20 200.30 77.40 229.00 365.76 253.90 142.10 0.0 0.0 0.0 0.0 0.0 209.00 225.40 345.20 345.	209.00 225.40 311.40 510.00 414.5	345.21 245.2	U. 30 CB9.	0 226.50 365.	0.250.2	0 2		· -	۰,
289.80 255.40 315.20 318.80 410.70 302.50 773.50 274.90 355.70 255.70 475.10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	789.00 278 PP. 355 PP. 355 00.885.	100 May 211 Car 2	20 20 21	4 7 00 576	1 3 9 4 9 5 9 5			•	•
207.00 KES.40 312.00 316.00 357.10 393.KF K45.20 200.30 K75.50 K34.40 353.70 262.10 146.20 0.0 0.0 0.0 0.0 0.0 K89.00 22.40 314.50 527.70 504.20 303.KF K47.20 200.30 K75.50 257.60 456.00 262.10 149.90 0.0 0.0 0.0 0.0 0.0 - K89.00 22.40 313.20 350.30 377.10 303.70 YES.KE AND 30 XF XF AND 445.MF 45.MF 457 151.50 0.0 0.0 0.0 0.0	Tenth on the contract of the c	10 10 10 10 10 10 10 10 10 10 10 10 10 1		257.UU 353.	V.CC2 0	61.	•		.
289,00 ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	1./cs uu.ale uc.cle uv.ess uu.es	5:13.41. C+2.	6.50 × 75.	234.9U 3n5.	0 262.1	P•30	· · ·	·	•
289.00 225.44 315.20 350.30 357.10 363.20 243.70 260 40 275.40 243.40 444.00 244.70 151.70 0.0 0.0 0.0 0.0	69.00 220.46 514.50 527.70 564.5	305.7(24 :	0.50 . 75.	257.8U 45c	4.1	6.6	, 0	0	0
	89.00 225.40 515.20 450.50 45		0 80 075	244 OH 444	0 264 7	, _			

MUNTILY DATA FO

MATERIALS ON!

<u>.</u>	98888
18 OTHER 3723,9 FY	
372 372	000000
17 ENG 3722	00000
16 ACFT 3721	90000
15 15 ELECT 3674+9	000000
14 15 1178XX ELECT ELECT 3674.9	153.40 155.30 157.00 158.10 158.20
13 2505XX TI-MIL	284.60 284.60 285.00 291.50 292.50
1 2 3 4 5 5 7 15 16 17 18 10 11 12 15 14 15 16 17 18 10 17 18 17 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18	
11 102502 CPZERS	25.440 25.440 25.440 25.440 25.440 25.440
13 250117 EXTICU	
9 250113 5C.5TK	
238161 4LUMB	247.76 245.30 247.30 247.70
7 2 < 0151 MAGIIES	322.70 322.70 322.70 522.70 322.70
223111 223111	541.44 243.34 2242.90 242.90 285.70
ว 1561ย3 คือหลัย	550.30 350.30 345.50 345.50 345.50 345.10
153141 CAST	316.50 316.30 320.16 337.80 358.60
5 130ce4 5TvLS	252.20 252.20 250.60 250.60 230.60 231.00
2 130262 CR STI	504.50 304.50 504.50 289.00 289.00 289.00
1 2 3 4 5 6 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	214.10 215.60 217.30 218.80 219.90
CY/HO	BUAPR BUMAY BULUN BUAUL BOAUG

in the

APPENDIX I

HISTORICAL INFLATION INDICES

RAW MATERIAL PORTION ONLY.

HISTORICAL INFLATION PRE-1958 INDICES

RAW MATERIAL PORTION ONLY

AGGREGATE AIR VEHICLE EXCLUDING AVIONICS	•	•	100.0 1.0000	•	~,	~,	~,	-,	•	••	•	•		•
PRUDUETION	FACTOP	FY30=	1,0000	115	4.0700	3.5706	3.5488	3.3701	5.0205	5.0235	2.9297	2.9068	2,7220	2 5060
Eve Inc P	13UEX	CY67=	100.0		55.2	41.2	41.5	43.7	40.7	48.7	50.3	50.7	54.1	3.35
RFRAME PRODUCTION	FACTOR	FY80=	1.0000	,	3.6256	3.2574	. 3.2219	3.0247	2.6930	2.7143	2,6514	2,6293	2.4507	2.25.46
AIRFRAME	INDEX	CY67=	100.0	*	17.0	19.2	19.3	20.6	23.1	22.9	23.4	23.6	25.4	27.4
			CŢ	;	~+	9	T. T.	ŠČ	51	25	5.5	ţ	55	Şe

.

HISTORICAL INFLATION CALLGUAR YEAR INDICES

RAW MATERIAL PORTION ONLY

	AINFKAME	AINFRAME PRODUCTION	END Lat.	PRODUCTION	AVICUICS	AVICTICS PRODUCTION	AGGREGATE Excluding	AIR VEHICLE Avionics	AGGREGATE Including	AIR VEHICLE AVIONICS
	ENDEX	FACTOR	INDEA	FACTUR	INDEX	FACTOR	INDEX	FACTOR	INDEX	FACTOR
	CY67=	FYBUE	C Y 0 /=	FYOUE	CY67=	FYBÜ=	CY67=	FY80=	CY67=	FY80=
7.7	100.0	1.0000	100.0	1.0000	100.0	1.0000	100.0	1.0000	100.0	1.0000
:	•			1 1 1	1		1111	*****		* • • • • • • • • • • • • • • • • • • •
90	27.7	2,2419	33.6	2.4730	31.5	1.5123	34.8	2.3298	34.5	2,2551
59	25.8	2.4088	56.3	2.6175	51.3	1.5163	32.6	2.4889	32.5	2,3952
6.0	26.2	2,37.56	57.2	2.5432	50.7	1.5504	53.2	2.4393	33.0	2.3549
61	25.4	2.4480	57.0	2.5851	30.9	1.5364	32.4	2.5016	32.3	2.4092
29	24.5	2.5328	55.0	2.6391	30.5	1,5623	31.5	2.5747	31.4	2.4765
63	23.7	2.6284	53.2	2,7675	30.1	1.5786	30.2	2.6829	30.2	2.5727
70	23.5	2.6405	49.6+	×.9596	30.0	1.5886	49.4	2.7606	29.4	2.6414
Ç	23.b	2.6345	44.0	3.0046	30.0	1.5886	29.5	2.7724	29.3	2.6514
99	23.8	2.6091	47.8	2.9598	30.05	1.5463	29.6	2.7402	29.7	2.6165
10	24.1	2.5738	52.8	2.7096	51.5	1.5108	30.5	2,6599	30.6	2.5416
6.0	24.5	2.5372	54.3	2.7113	31.2	1,5229	31.1	2.6047	31.1	2.4962
6.9	25.5	2.4575	57.8	2.5483	51.7	1.5002	32.7	2.4810	32.6	2,3855
7،	26.2	2.3097	65.3	2,2562	31.0	1.4958	34.9	2,3225	34.6	2.2465
71	26.2	2,3744	67.7	2,1768	32.5	1.4753	35.4	2.2904	35.1	2,2155
7.2	26.6	2.3389	65.5	2,2351	32.6	1,4611	35,3	2,2958	35.0	2.2183
7.3	27.3	2,2793	5,99	2,2260	52.9	1.4471	35.9	2,2575	35.6	2,1627
7.	34.2	1.8201	82.5	1.7778	55.1	1,3561	45.0	1,8028	0.44	1.7671
72	39.1	1.5891	95.7	1.5367	36.4	1,5080	51.7	1.5684	50.2	1.5495
7ó	42.2	1,4717	100.6	1.4645	36.5	1,5046	55.2	1,4688	53.3	1.4576
11	45.6	1.5034	111.5	1,3214	57.6	1,2642	60.2	1.3461	58.0	1.3408
78	7.64	1,2527	113.2	1,3009	40.0	1,1905	63,5	1.2779	61.1	1.2722
73	55.6	1.1188	130.2	1.1316	42.8	1,1125	72.2	1.1240	69.2	1,1232

OPFICE THEORY OF THE STATES

RAW MATCHIAL PORTION ONLY

CLE																																															
AIR VEHICLE Avionics	FACTOR	FY80=	1.0000	•		2.5519									2.5062																		2.2517														
AGGREGATE Including	INDEX	CY67=	100.0		30.4	30.5	30.5	30.6	30.9	31.0	31.1	31.2	31.2	31.2	31.0	N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PT 0-	31.1	31,1	31,1	31.1	31.5	31.9	32.0	32.2	32.2	32.5	0.00	3 C K) de ()	33.5	34.2	5. 3.0	n	0 to 10 to 1	34.6	34.7	34.6	34.6	34.6	34.6	34.7	34.7	24.7	34.6	34.9	35,1
AIR VEHICLE Avionics	ACTOR	=0	0000		•	2.6711									2/197						2.6078												2.3294									314	316	321	327	310	75°
AGGREGATE Excluding	INDEX	C167=	100.0	•	-	•	-	30.7	-	30.9	31.1	31.2	31.2	31.2	31.0	1 10			-	•	31,1	_	_	32.0	32.2	32.3	32.6			33.6			9 t .													35.1	35,3
PRODUCTION	FACTOR	F 780=	1.0000		.513	1.5153	.518	3	. 524	.512	.515	.519	, 52¢	710.		526	. 526	•	.526	.524	. 524	.527	.507	. 504	•	100.	501		49.	489	.485	.489	1.4899	7004	501	.513	492	• +92	• 495	.458	1.4884	.462	82	469	•	4 5	65
AVIONICS	I HUC X	C107=	00	;	31.4	31.4	31.3	31.3	51.2	51.5	31.4	31.5	51.2	616	31.0	31.2	31.2	31.2	51.2	31.2	31.2	51.2	31.6	31.6	31.7	51.7	31./	31.7	31.9	31.9	32.0	51.3	51.9	2 · ·	51.7	31.4	31.,	31.9	31, d	52.0	32.0	52.1	52.1	32.4	32.5	32.7	52.5
PRUDUCT 10N	FACTOR	FY8U=	1.0000		2.6108	2.8106	Φ.	•	•		•	•	•	•	C. (103	708	679		۲.	۲.	2,7215	÷	•642	. 542	2.6512	979	9/5	0 / L	586	407	415	.310	2.2624	2020	264	.261	•	.261	261	•	251	.230	N	.236	.236	.212	<.20by
ENGINE PH	ITILEX	CY67=	100.0	1 1 1	54.4	52.4	52.4	53.7	54.1	54.1	24.1	ທີ່. ສຳຄັນ	ດ :	* : * :	* 3 * 3 0 IO	3 40	9.40	54.4	54.4	54.1	54.1	50.7	55.7	55.6	56.0	100	, r	7	5,95	61.2	61.0	63.8	65.1		65.1	65.1	5. 2	65.2	2.50	Ω.	65.4	Ω,	so.	n.	,	٥.	0.00
PRODUCTION	AC T	FYAUS	1.0000	:	v.	2.5042	43	ۍ.	r.	ທີ່	ဂ္ .	ก	שלה ה ה	700	2.5370	522	525	543	545	538	£.	35	.47	\$	•	<u>.</u>	2 0	3	3	*	404	'n,	2.5//0	K.		561	339	36	5	5.		7	575	364	9	700	50
AIRFHAME P	INDEX	CY67=	00		24.0	24.1	24.1	24.2	24.3	24.3	C. 47	9.47	4.0	24.3	9	24.6	24.7	24.4	24.5	24.5	24.5	24.6	25.1	23.2	25.4	25.0	20.00	25.8	25.6	25.7	25.8	26.1	26.0	26.1	26.2	26.3	26.3	26.3	6.03	7.97	9	•	•	0 4	•	1 0 7	
			FΥ	:	20	9	9	9	99	9 0	0 :	0	0 1	9 4	3 5	69	63	69	69	69	69	6	50	7	6 4	0	6 6	70	70	70	9 ;	2 6	2 2	70	7.0	20	0 :	7;	7 :	7 ;	:	7 .	7.5	7 5	7.7	::	•
			۲	; ;	67	5	,	19	٦.	2		9 4	9 4	3 3	19	99	p	99	9	20 (6	,	,	70	64	6	69	69	69	60	69	6 6	2 2	70	0.2	20	2 ;	3 C) 	2 6	2 5) : -	2 ;			: 5	;
				!	٦ ا	A .	25.	TOO.	2 () 1	2 4	244	2 0 2 0 2 0	: ×	2	الدر	A U6	SEP	ָ בּי	A 02 :	ָ ה ה	2 7	ב ב ב	X S	4	7	3	A U6	35.4	0CT	7 020	֓֞֝֞֝֝֞֝֞֝֓֞֝֞֝֓֓֓֞֝֞֝֓֓֞֝֞֡֓֓֞֞֞	1	# A M	4	≻ ⊲ ₹	2 7	, ,	200		2 2	2	101.		1 4	1	:
	,			,			,			,			í			,					ı)		,	,		,	,		1			1		,			,								,	

																			į				, .	•.	4,4	•	Ą	· ·	*	*		į	,	*																										
2.2158	2007.2	4767.7	2.1911	5.1737	2.1941	2.1960	2,2005	2.2037	2,1877	2.1819	2,1797	2.1744	2,2336	2.2344	2.2436	2.2433	2.2473	2.2467	2.2462	20.00	0000		2000	2.4110	2.1084	2.173	2.1765	2.1737	2,1613	2.1835	2.1394	2,1181	2.0669	2.0549	1.9922	1.9309	1.6269	1.7674	1.7005	1.6318	1.6294	1.6011	1.6003	1.5977	1.5418	1.5578	1.5592	1.5541	1.5444	1.5553	1.5535	1.5395	1.5390	1.5434	1,5513	1.5524	1.5118	3	.501	96+
55.1	٠	•	•	•	•	•	•	•	•		•	•								•	•	•	•		•			•						•								•			•	•	•	•	•		50.0	•	•	•	•		51.4	51.5	~	~
2.2914	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•				•	į	•	•	•	•	'n	ď	0	ď	~	8	,	ď	ď		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
35.4	n.		ć	ŝ	'n	'n	ŝ	ċ	'n	ŝ	Ġ	ġ		2	•	•	4) (N 0	N :		ċ	ċ	ġ	0.9	. 1.9	10.0	3	6.7		0 6	10.00	9.6			•	9	6	6	6	9	ċ	-	-	;	-	-	-	-	ď	ď	å	-	•		53,2	έ.	*0
1.4710	•	•	•	٠	•	•	•	1,4753	•	•		•	•		•	•			•	•	•	•	•	•	٠	•	•	•	•		•	•		•	•		•	•		•	•	•	•	•	•	•	•	•	. 3 06	÷96÷	.306	.312	. 319	. 326	. 521	. 521	,319		.517	. 514
32.4	v	v	ν.	N	å	52.3	å	ċ	ċ	ċ	2		2	٦.	•	•				•	•			٠	•	•					, ,					•				•			36.08		•	36.9	•	•	٠	٠			•	•	•	36.0	•		•	
3	*	***	. 1 + 4	٦.	٦.	7	٦.	•	7	7	7	7	~	3				. "	. "	? "	? "	י ני		Ņ	ņ	٠,	4	7					: ־	7	٠,	٥.	æ	۲.	۲.	•	9		1.5870	ı.	*.	'n	'n	ů	ı.	246	ţĊ.	544	.544	540	.570	.570	473	#	.4,1	364.
66. to	•	7	64.7	b	nd .t	9.50	4.83	Ð	69.7	7	2	7	4.	#	*	-	-	M		3 4	3 4	2 0	3°C	n	۰	~	~	~	~	67.2		67.6	- 32	6	~	10	0	N	S	91	-	~	92.8	*	3	ø	ġ	9	٠	ċ	45.2	\$	S	S	95.0	~	£	5		20
305	ري. دي:	605.	353	356	.356	,354	.351	.369	.347	.342	.337	.330	332	354	3.52	330	337	N C) ×) .) .	300	110.	.306	.236	.284	.286	-282	262	244	225	7	120	.105	.038	956	. £ 9.B	. 855	.751	.685	+69+	646	652	169.	£14	:11	* 1 4·	.637	57.0	543	265.	505.	Frat.	. 364	565.	553	40.	1.5440	53	.523
;	ċ	í.	Ġ	;	ġ	ġ.	ġ.	•	•	ġ	ġ	ġ	9	•		Ġ	٥	Ś	3	:,	•	έ.	٠,	٠.		,			7				6	6		=	ď	'n	ċ	•	ġ	7	7	۲.	÷.	ė	ė.			6	ċ	•	,	•	ς.		ċ	40.3	•	<u>.</u>
	_ 1	•	,	_			_		_	_	_		_	~	_	_	~	_		٠,		•	- 1	- (_	_	_	~	~	_	_	~	_	^	^	_	_	~	_	^	~	_	-	_	_	_	_		_	~	~	^	~	~	~	1	7	_	^	7
7 7																																																												
Ž.	7	3	3	2	3	Ž	3	¥ 5	Ĭ.	Ā	AP	4	3	2	AUE	SF	0	2	3	3			Č Č	4	E	3	うっ	Ą	SE	ວ	Ó	LE	3	FEE	MAK	A P	Ā	Ē	รี	30,4	SEF	20	Š	OEC	4	1	A A	7	ž	Š	5	∀	Ž	3	Ŝ	2.7	47	Ftu	I I	A V X

I 5

INFLATION INDICES RAN MATEP'AL PORTION ONLY

1.4614	468	4634	7	*	1.4	403	.411	6	. 393	73	~	.338	۳.	77	•	۳,	m	.31	1.3161	.31	£.	2	1.2946	•	•	1.2666	•	•	1.2519	1.2472	1.2371	•	114	•	1.1300	122	7	•	0	90.	ě.	.03	905	.980	.977	9	. 982	196	•		0.9724
-	52.9	3.1	3	55.1	•	•	55.1	-		56.6	•	_	_	59.0	_			-	59.1	-	59.3	_	•	-	_	_	62.1	-	_	N	Ň		•		. 6			•		•	•	•	٠	•			79.1		-	79.8	0.09
1.4938	4	4747	874.	1.4174	*	• 417	.419	407	405	77 (.361	.343	338	77	7	1,3252	~	7	M.	~	1.3173	~	'n	ď.	1.2841	Ŋ,	ď	ď	ď	CV (,	1.2318		u -	: =	7	7	0	.097	.082	• 039	.034	* 0.5	976	976	. 981	963	B :	976	7.7	0.9746
	54.8	0	56.0	57.2		•	57.1	•	•	•	٠	÷09		•		_	_		61.4		;	•	ċ	·	M)	÷.	÷	÷	÷	64.7	ů.	60.48	•	· σ		8	3.	'n	'n.	÷	æ	œ.		٠.	85.1	•	ů (82. 2.0. 2.0.	· .	ů,	'n
1,5157	36	. 509	1.3060	.30	٣.		್ರಾ	•	•	1.2761	•	•	•	•	•			•	•	•	.211	200	N	199	. 191	-	.169	.187	175	162	701.	1 1515	147	138	1,1350	٦.	.106	-	.083	.079	.073	. 063		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ν. 	. 754) : 	500	30.0	ν η υ ν υ γ	•
36.2		9000	56.4	•	å	٤	36.7	٠,	٠,	57.2	٠,	٠.	٠.	7		an.	•	'n	30.3	÷.	• :	.	34.0		ž.	• •	÷ .	•	.	か。 ココナ	· .	4 1 4 1		•	, ,		'n	43.2	o :	.	* * *	• •	٠.	7.1.	• ;	C :	c :	•	נ ת	r :	1.00
1.4394	4.	3	3	.427	1.4276	Ý.	3	•	٠,	ĸ,	. 349	.306	•	205.	288	•	.297	.304	1.3439	323	.321	•	.329	.316	304		278	.281	288	267	2 4	1.0400		: -:	140	1.1228	1.1004	С,	9	1.0841	•))		• 1	71.72	200	177	ກ່ວ	200	1906.0
¥0.			102.0	•	3	ς,	103.2	3	e G	<u>.</u>	֓֞֝֜֝֜֝֓֓֓֓֓֜֝֓֓֓֓֓֜֝֜֜֓֓֓֓֓֓֓֡֓֜֝֓֓֓֓֡֓֜֝֡֓֡֓֡֓֡֓	å	13	1.4.	7	13	٠	15.				::	. ·	•	N :	• •	115.5	<u>د</u> :	* ;	1 T + " + T I	;;	. 6	5	24.	2	31.	8		• u		• :	٠ •	• • &	• 7	าฮ	•	K • 11 • 1	•	r c 3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	• ,	•
	1.47:1	•	1.4507	3.	1.4 125) . 1 .	# \ 	4 I I		1.4010	?'	1.35.10		. 542	٠,	. 344		•	•	•	•	•	•	•	•	•	•	•	• `	•	• "	1.2040	7		٠.	7	Ξ,	•	•		•	3 3	100	9 7	•	,	` 7	: :	4 1	;	
-;	\sim	٠,	45.9	3	*	•	2) ; T P T ;	า :	•	7 :			• •	*	# · 9 #	•	•															51.6																0 0			•
																																																0	90	000	,
																					7 7	2 1	2 1	2 2								19				6/	7 7	. 6	?	46	7	9	S. S.	9	80	80	3	9	9		
7 7	֓֞֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	ر ا	4 76	2.0	י כו	> :	היי	7 4	נים גים	1 7		7		٦ ٦	9 : • .	אר הי		2	3 :		1 2	1 2	(): ():	2		֓֞֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜		100	2	DEC.	JAL	FLB	A A F	APR	Y A H	٠	100 100 100 100 100 100 100 100 100 100	2 2 2	00.7	NO.	ט ה	117	4 11	7	4	17 15	ان د ن	ان ا	۵. د	5:5	

4.4																																																
AIR VEHICLE Avionics	FACTOR	F Y 80 =	•		116.7	7 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 ·	A + 4 4 4 3	1061.0	K + 400	2 4440	7 T T T T T T T T T T T T T T T T T T T	2.3884	2,3078	0.00.0	2.2472	0.0440	2.2411	2.2393	2.2088	2,1921	.1969	.1910	.1956	2.2405	.2467	2.2335	1919	2.1705	2,1369	2.0581	*9+0*I		10000	1.5513	1.5440	1.5490	ທຸ	₹.	1.4370	*.	.388	٦	.317	M 1	. 307	200	900	Ù.
AGGREGATE Including	INDEX	CY67=	100.0	١.	000	50°5	21.5	31.0	7076	11.1	2.00	0 4 6 E	144	, K		7 72	34.7	34.7	35.2	35.5	35.4	35.5	35.4	34.7	34.6	34.0	33.5	30° 60	36.4	38.1	#5°1	0.4	4 - 5 4		0	50.5	51.6	52.5	54.1	5	•	7	ζ.	φ.	6		-	62.4
E AIH VEHICLE S AVIONICS	FACTOR	80=	•	! `	•	• •	٥	. פ				Z = 303/	. "	? ×	ייי נ	. ~	. "	"	284	N	.269	.26¢	.270	.321	329	•	.267	. 244	.207	2.0981	888	1.6820	674	1.5707	.561	.566	.521	***	446	.417	.396	347	.321	32	.314	1.2928	261	2
ALCHEGATE EXCLUDING	INDEX	~	100.0		7.00	7 · 7	21.5	21.1	21.5	1.15	0.10	4.76	9 7 7	7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 6 4 4 K	•	· .	'n		35.8	5	5	Ş.	÷	÷	35.0	ů.	ġ.	•		42.9	O 00	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	51.6	51.9	51.8	53,3	54.3	56.1	57.2	58.1	٠	61.4	61.3	.	ċ	÷	a0 •
AVIOHICS PROGUCTION	FACTOR	780	00.		•			וי יו	, a	U u		1.5017	•	•	• 	, :			. 7	. ₹.	₹.	₹.	•	•	•	1.4578	•	•	•	•	•	v) i	•	1.5039	•	. 323	517	1,5126	.307	Ŋ	. 279	٧.	992.	447	200.	.198	. 10B	1660
AVIOAICS	11.08.8	C167=	100.0		51.	-	51.5	21.5	•	5116	÷ 10	31.7	- C R	26.0	31.7			100	32.4	32.5	32,3	52.5	32.7	32.7	34.5	32.6	52.9	52.7	33.1	33.6	34.0	35.0	0 to 10	0,4	٥		30.1	36.3		•	37.2	57.4	٦.	•	6	۲.	•	c • n +
PRUDUCT 10N	FACTOR	F 780=	1.0000		201	729	`.'	`.'	•	``	•	•	6.3177		C. C. C. C.	•	4 0	2.2286		2,1450	٦.	2.1444	•	•	.315	•	2,2266	2.1970	2.1460	•	1.8670	•	1.585/	1.5512			•	1.4894	•	1.4274	1.3779	.318	.291	301	.322	.317	Š	1.2852
ENGINE P	INDEX	_	90	ŀ	٠	# :	•	•	•	• •	<u>.</u>		: .	•	n u	•	•	,	, ,	20	ຶກ	ູ	67.5	ç	×,	64.1	ġ	,	7	•	ø.	30 (10.0	ŝ	•	÷	49.4	٠ 1 ،	2	===	111.8	•	. 3	:	1.		114.8
AIRFHAME PRODUCTION	FACTOR	108	20	!	Ť.	ą,	٠. د	.) (7	. 53	\$ ·	4	*	•		2				35	٠,	~	٣.	٠,	٠,	'n,	۲,	₹	۲	٠.	ν.	1.7066	6253	1 20.1		1.5093	٠,	1.4943	*	*	4	1.3635	~	•	1.5093	?	, t	1.2299
AIRFHAME	INDEX	CY67=	100.3	•	•	# :	•	• •	•	÷.	ů,	23.5	•	ů,	1.02	•	•			•	۵	•	å	Ġ	Ġ.	Ġ				· .	ູດ.	٠,	٠,	7 e 2	6	6	0	-4	43.1	#	÷.	t 0. t	Ġ	۱٠		e e		50.6
			UIR CY	;		, e	100		99		60	69	1	r o r	7) (7 7 7	17	211		4 71	1 72	2 72			1 73						9 7		22.	5 75				3 76		1 77			77	_	2 78	9 j	10
ı	,	ı																				. 1		7							`								•			•						•

	1.2147	1.1385	1.0996	1.0528	コオのブ・ロ	0.9622	0.9746
	64.0	60,00	70.7	73.8	18.4	19.2	79.6
	1.4199	1.1587	1.0997	1.0515	0.3324	0.9828	0.9703
걺	86.5	71.6	73.7	77.1	11.1	85.58	43.1
L PORTIO. ONE	1.1524	1.1522	1.0974	1.0720	1.0152	U. 1732	0.3500
AW MATERIAL	44.5	46.01	+•0+	2° † ‡	7.4	* e o *	1.00
œ.	1.2401	1.1	1.000	1.0027	0.415.	30,00	1.7177
	11	1.7.	C. P.C. I	1,000	1.1.4	14 , , ,	14.7.2
	1.035	1.154	1.13%	1.037	4.4.7.9	4.34.48	10.1.107
	1.10	0.07	ر ۵۰	2,6€	7.1.	1, 5 , 1	7.42
	•	7.7	ĭ	7.2	`	30	2

HISTORICAL INFLATION FISCAL YEAR INDICES

RAW MATERIAL PORTION ONLY

134

1

14-71

